DOCUMENT RESUME

ED 217 782 HE 015 171

AUTHOR	Johnson, Karen R.; And Others
TITLE	Evaluation Report: School of Nursing Outreach Program.
INSTITUTION	Virginia Univ., Charlottesville. School of Nursing.
SPONS AGENCY	Department of Health and Human Services, Washington, D.C.
PUB DATE	[82]
GRANT	DHHS-D23-NU-00180
NOTE	152p.
AVAILABLE FROM	University of Virginia School of Nursing, Charlottesville, VA 22903.
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	Access to Education; Accountability; College Faculty; Educational Benefits; Educational Demand; Extension Education; *External Degree Programs; Graduate Study; Higher Education; Instructional Student Costs; *Masters Degrees; Needs Assessment; *Nursing Education; *Outreach Programs; Program Costs; Program Evaluation; Questionnaires; *Rural Areas; School Community Relationship
IDENTIFIERS	Medically Underserved Areas; *University of Virginia; *Virginia (Southwest)

ABSTRACT

The University of Virginia's Outreach Nursing Program is described and evaluated. Information is provided on the results of a needs assessment, a feasibility study, and the early history of the off-campus program. Attention is directed to the geography of the outreach program area, the group of nurses from which the first class was selected, course offerings, faculty, and enrollments. The degree to which the program objectives were reached is examined. Objectives include the following: expanding opportunity for graduate education in Southwest Virginia, focusing on medical-surgical nursing and also on education, clinical specialties, and administration; developing faculty members and additional graduate educated nurses for service in the rural setting; and improving the overall quality of nursing care in the area. Evaluation efforts were also directed to the direct instructional costs of the off-campus program, using student credit hours; and average academic degree program costs for a student. The following benefits of the program were also evaluated: personal and social economic benefits/noneconomic benefits for students, faculty, the nursing school and the University of Virginia, and the community. Negative outcomes and problems as reported by students, faculty, advisory committee members, and nursing school administrators were also determined. Among the conclusions was that the institutional and professional relationships resulting from the Outreach Program were important outcomes. Overall program accountability and the methods used for program evaluation are discussed, and a bibliography, questionnaires and interview forms, a list of students and advisory committee members, and a list of thesis and project titles are appended. (SW)

ED217782

EVALUATION REPORT

SCHOOL OF NURSING OUTREACH PROGRAM

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This report was compiled with the assistance of funds received under Department of Health and Human Services Grant No. D23-NU-00180. The School of Nursing and the University of Virginia wish to acknowledge this support and express general appreciation of the Department's cooperation in funding the Outreach Program.

Appreciation is also extended to Lamont D. Nottingham, Hope R. Hamilton and Alexandria J. Deloatch for their contributions to the evaluation project.

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FOREWORD

When planning began for the Outreach Nursing Program in the mid-1970's, we were excited about the many opportunities such a venture would afford us as a school and as a faculty. Primarily, the Outreach Program allowed us the opportunity to respond to the educational needs for graduate education for a large number of qualified citizens of the Commonwealth geographically distant from the educational institution offering graduate nursing education--and in this respect allowed us to meet one of the major goals of the University of Virginia. Many of the Outreach students could not have engaged in graduate nursing education without this program. Another important opportunity was to become involved in cooperative planning and implementation of the program with the only other state-supported university school of nursing offering graduate nursing education at that time. This interinstitutional cooperation was indeed a positive experience for us. As those of us who have been involved in nursing education for any length of time know, such cooperation can be a rare occurrence.

In the spring of 1981, twenty-two graduates of the Outreach Program received their degrees at the University of Virginia. When the program is finished, more than thirty nurses will have received master's degrees from the University which they might otherwise never have had the chance to pursue. More than a dozen others will have been able to extend their education beyond the baccalaureate degree through access to the Outreach Program. The communities in which these nurses work

will undoubtedly be served better as a result of their expanded educational experiences. The School of Nursing gains as well in the accumulated knowledge and experience collected throughout the duration of this innovative program.

This report shows that most of the objectives set forth during the planning stage of this program have been met. Our efforts will continue in the coming months to collect more information about our long-term successes and shortcomings. The objective of this continuing evaluation will be to assess the ways in which programs similar to the University of Virginia Outreach Program can be made more efficient in operation and more accessible to the regions and students who need such programs most.

As always, our goal is to enhance the quality of nursing care through expanded and improved nursing education. It is our belief that the Outreach Program has helped us toward that goal. Our hope is that this Evaluation Report will be of help to others in pointing out both the value and the pitfalls of off-campus instruction.

The program has always been a challenge, at times a trial, and truly rewarding because of the commitment of the faculty and students involved.

Rose Marie Chioni, Ph.D., Dean
School of Nursing
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PREFACE

In developing a conceptual framework for evaluating the Outreach Program, a very important concern was that the report be easily understood by academic managers in nursing schools and by other decision makers in higher education institutions. The evaluation strategy was to be straightforward in the sense that the procedures could be followed by others with degree program concerns. The strategy was also conceived to be comprehensive in the sense that essential facets of planning and implementation were considered.

As one reads the report it is obvious that rigorous statistical methods, both in measurements and analysis, are missing. This alternative was selected in part because of the audience for whom the report is intended. While the literature on evaluation methods contains an abundance of quantitative methods for analyzing data, numerous suggestions of forms designed to collect information for study and judgment, and all sorts of diagrams and schemes depicting systems approaches, it leaves one with the impression that evaluation is more concerned with procedure than with helping academic managers to understand and use information in making good decisions.

As indicated in the evaluation report, a summative or outcomes approach was taken. There are two reasons for this: 1), the evaluation team was appointed near the end of the project. And, 2) formative or process evaluation was not an important issue in this project. Formative evaluation has historically been the responsibility of the faculty. They have accepted this duty well and are in a better

position to detect and correct weaknesses in program process. It is unusual that any external evaluator has the expertise, experience, insight and knowledge to appraise the academic processes of degree programs. However, an external evaluator is in a much better position to observe, record and interpret outcomes of programs and compare these with expectations. The role of an external evaluation in measuring outcomes should, therefore, be combined with the expertise of faculty members and administrators who can focus on the quality of academic processes.

The evaluation strategy developed for the Outreach Program addressed five basic issues. These were (1) To what extent were the program goals and objectives met? (EFFECTIVENESS) (2) How much did the program cost to produce certain desired outputs? (EFFICIENCY) (3) What were the positive outcomes of the degree program? (BENEFITS) (4) What were the negative experiences of the program? (NEGATIVE OUTCOMES) and (5) Was the program worth the effort and cost? (OVERALL PROGRAM ACCOUNTABILITY)

The approach used in evaluating the Outreach Program was organized in the following sequence: identifying and specifying the problem; identifying and specifying student needs; assessment of institution's mission in relation to student needs; assessment of program feasibility; developing degree program and acquisition of human, financial and physical resources; allocation of these resources; and implementation of degree program and evaluation of program outcomes.

In Section I the problem of the Outreach Project was identified as a serious deficiency in the numbers of graduate level prepared nurses. The shortage extended into areas of nursing service, faculty and

research. Surveys revealed that nurses without graduate degrees identified problems of accessibility to campus programs and job responsibilities as prime causes for not being able to raise their level of education. The prospect of conducting an off-campus graduate nursing program was viewed as a part of the mission of the University of Virginia. Thus, the problem of attacking the shortage of nurses prepared at the graduate level was accepted by the School of Nursing.

A needs assessment was conducted to identify whether there were adequate numbers of potential students with interest in pursuing a master's degree program. Findings of the constituent groups revealed an interest in medical-surgical nursing with a minor in the functional area of education. The southwestern part of the state was revealed to have the most difficult problems of accessible degree programs offered to full-time employed nurses.

In order to place a graduate program to meet the constituents' needs, a feasibility study was conducted to obtain information on actual numbers and location of potential students, areas of program interest, financial support, community resources available, faculty resources and other resources desired to conduct an off-campus program.

A curriculum plan was developed for a master's degree in nursing to meet students' needs. Methods and procedures for program implementation were developed. Resources were acquired and allocated in terms of faculty, finances and community facilities.

Section II is a description of the Outreach Program. Students, faculty, course descriptions and enrollments are detailed to provide the reader a frame of reference for the subsequent section.

The evaluation strategy is described in Section III. The remaining five sections report on evaluation methods used, findings and discussions of effectiveness, costs, benefits, negative outcomes and overall program accountability of the Outreach Program.

In summary, this evaluation report represents the culmination of the major effort of assessing the outcomes of the Outreach Program. As its conclusions indicate, the major objectives of the program have been met. This evaluation has necessarily concentrated on factors which could be assessed in the short term. Future evaluation efforts will concentrate on developing a structure to assess the long-term impacts of the Outreach Program and to determine if the long-range objectives specified in the grant proposals and planning documents have been accomplished.

Although the broad goals and program objectives have been met, it is clear that anyone wishing to begin a program such as this has problems and built-in difficulties to acknowledge. If this report can help future off-campus efforts to run more smoothly, it will have served a large part of its purpose.

SECTION I

INTRODUCTION AND PROGRAM BACKGROUND

More than thirty nurses will have completed the University of Virginia School of Nursing Graduate Outreach Program when funding ceases in June 1982. The efforts which culminated in this new pool of master's level nursing talent for the southwestern Virginia area began more than eight years ago. The purpose of this portion of the evaluation report is to describe how nurses and educators in Virginia identified the problem of the shortage of graduate prepared nurses in the state and the approach taken toward solving that problem. Details of the early history of the Outreach effort are included along with a description of the assessment of need and feasibility study portions of the project.

Problem Identification and Statement of Need

In the early 1970's, the Deans of the Schools of Nursing from the Medical College of Virginia-Virginia Commonwealth University and the University of Virginia began to discuss ways in which cooperative planning for extending statewide opportunities in graduate nursing education might take place. These discussions revealed the concern of both schools that a serious deficiency in the numbers of master's prepared nurses existed. By the time the two schools came together for planning efforts, the need had been documented in several ways.

A recently completed survey of graduate education needs in nursing in fourteen southern states was described in Graduate Education in Nursing in the South, A Report to the Southern Regional Education

Board (Nahm, 1971). This survey focused upon existing and future needs in nursing education. The evidence submitted pointed clearly to the need for expansion of graduate education in nursing.

Nahm (1971) stated that the lack of prepared faculty for educational programs in nursing is one of the most serious problems in nursing in the South. Severe shortages of nurses prepared for new and expanding responsibilities in patient care were also indicated --nurse clinicians and practitioners, administrators for educational programs and complex nursing service areas, and nurses who could provide leadership in improving patient care. Preparation for these roles, critical in light of rapid social and technological change, appropriately takes place at the graduate education level.

One recommendation of the Nahm Report suggested the development of cooperative planning for expansion of graduate education among schools of nursing within and between states. Cooperative planning among schools, (a consortium), was becoming a popular concept in the literature of higher education. The consortium concept encouraged more effective utilization of available resources, avoidance of duplication of educational offerings, and financial savings. Nahm (1971) suggested that cooperative planning among schools of nursing would result in the development of imaginative new programs and of new teaching methods and techniques. The efficiency of the consortium concept had been tested nationally, with cooperative programs already in place in California, Nevada, Michigan, New York, and Tennessee.

In 1973, the General Assembly of Virginia amended the Code of Virginia to provide for the formation of six regional consortia districts

for continuing education. The purpose of this amendment was to provide for expanded opportunities in continuing education (credit and non-credit offerings) through interinstitutional cooperation. Inherent in the planning for educational consortia was the intent to provide maximum interchangeability of credits and to facilitate the earning of degrees by continuing education students.

Membership in each consortium was composed of all state-supported institutions of higher education and any privately-supported colleges and universities which elected to join, all within the designated boundaries of that consortium district. The state university located within each district served as the focal institution for that district and maintained organizational offices and personnel. An additional mechanism was provided for meeting educational needs if institutions within a consortium district were not able to do so. The University of Virginia and Virginia Polytechnic Institute and State University have been designated as comprehensive universities and may deliver programs in any consortium district requesting such assistance.

In addition to endorsing the existing state system of regional consortia as a legitimate approach through which nursing education in Virginia could be expanded, discussions with a variety of agencies and schools were held to determine interest, support, and need for graduate education. Some of the agencies consulted were:

1. State Council of Higher Education for Virginia
2. The Virginia State Board of Nursing
3. The Virginia Nurses' Association
4. The Virginia League for Nursing

5. Virginia Hospital Association
6. State and private senior colleges throughout Virginia
7. State community colleges throughout Virginia

These discussions provided positive and enthusiastic encouragement to proceed with planning efforts.

Although national and state statistics regarding educational preparation of faculty in the schools of nursing in Virginia were available, there were no accurate figures regarding the number of master's prepared nurses in nursing service positions nor the number of positions requiring such preparation. Therefore, a state-wide study of manpower needs in nursing was initiated by the State Council of Higher Education for Virginia to obtain data on current and projected needs for master's and doctorally prepared nurses in nursing service and research positions as well as in nursing education.

The membership of some of the Virginia Nurses' Association districts, already engaging in local surveys of graduate education needs, was actively pursuing avenues for extended programs. Nurses throughout the state identified problems of accessibility to established campus programs because of geographic distance and job responsibilities as well as home and family responsibilities. Off-campus courses had been offered by both university schools of nursing. In the summer of 1973, Virginia Commonwealth University offered undergraduate study in psychiatric-mental health nursing in Northern Virginia. The course outline was reviewed by the faculties of the University of Virginia and Virginia Commonwealth University and agreement was reached that credit for this course would be granted by either university. This offering was

viewed as successful by the participants. Graduate courses in curriculum and teaching strategies offered by the University of Virginia since 1974 had been received enthusiastically in the seven locations across the state where they had been offered.

Early in the discussion stage regarding the feasibility of developing an outreach program, it was believed that a planned avenue for communication at the grass-roots level of the nursing profession in Virginia would be needed on a continuing basis. The Virginia Nurses' Association, with its thirteen constituent districts, seemed a logical and appropriate vehicle though which a communication linkage could be established between cooperative outreach project planners and nurses throughout the state.

As early as 1974, a meeting was held with the Virginia Nurses' Association Council of District Presidents to exchange ideas about nursing education needs, share thoughts concerning the possibility of expanding educational opportunities through off-campus programming, and suggest the formation of a Virginia Nurses' Association-Cooperative Outreach Project Liaison Committee. The concept of off-campus programming in nursing education was well-received as well as the suggestion that a liaison committee be formed. Some of the council members indicated their district memberships were already gathering data regarding educational needs and interest was high in promoting an expansion of educational opportunities.

By April 1975, twelve of the thirteen district associations of the Virginia Nurses' Association had selected their representatives for the Virginia Nurses' Association-Cooperative Outreach Project Liaison Committee. The Committee was co-chaired by one representative from the

University of Virginia School of Nursing and one from the Virginia Commonwealth University-Medical College of Virginia School of Nursing.

The Liaison Committee convened for its initial meeting on November 4, 1975, in Williamsburg. Representatives of the State Council of Higher Education participated with committee members in a discussion of survey data regarding interest in graduate education in nursing and planning efforts regarding the proposed Outreach Program. The interests, concerns, and ideas generated by the district association representatives confirmed the cooperative outreach project planners' feelings that the involvement of nurses at the district level was essential to state-wide planning efforts. The formation of the Liaison Committee was a sound decision and the committee served effectively as a communication channel with nurses thoughout the state.

Feasibility Study

Because of the absence of data necessary to plan a graduate outreach program, the Deans of the two university schools of nursing requested a comprehensive study of the needs and interests of baccalaureate nurses for graduate nursing education. The study was conducted by the State Council of Higher Education for Virginia in collaboration with the Virginia State Board of Nursing and the faculties of the two university schools of nursing. Registered Nurse Licensure data of August 1975, revealed that 3,977 licensed nurses in Virginia reported a bacccalaureate degree in nursing as their highest degree. Of this number, 2,412 nurses (61%) resided in Virginia but outside the Charlottesville and Richmond areas. An additional 197 nurses reported holding a baccalaureate degree in nursing and a non-nursing master's degree. Of this number, 127 nurses (64%) resided in Virginia but ouside the Charlottesville and Richmond areas.

A questionnaire regarding interest in graduate education in nursing was developed for distribution to baccalaureate-prepared nurses residing in Virginia outside the Charlottesville and Richmond areas. Utilizing the "non-ordered" active licensure records of these 2,412 and 127 nurses referred to above, a systematic 40 percent random sample of 1,004 nurses was drawn and sent the questionnaire.

A total of 611 questionnaires (61%) was returned. Of this number, an impressive 492 (80.5%) respondents indicated positive interest in pursuing graduate education in nursing.

The data suggested that study in medical-surgical nursing and the functional area of education could be appropriately offered as areas for study in all of these six planning districts.

In April 1975, representatives of the two schools of nursing and the Virginia Nurses' Association met with the Advisory Committee on Education for Health Professions and Occupations of the State Council of Higher Education to discuss the preliminary findings of the survey. A proposal to proceed with collaborative efforts was endorsed by the Advisory Committee. Several joint meetings between the graduate faculties of both schools were held, and agreement was reached to proceed to determine the feasibility of joint graduate programming and, if found to be feasible, to plan such programs. Those who initially discussed the shortage of master's prepared nurses collected other information which further documented the extent of the shortage. A national inventory of nurses in 1972 had shown that Virginia fell considerably below the national average in the number of nurses prepared at the master's level for roles in teaching, administration and clinical specialties. The state ranked 31st among the fifty states in nurse to

population ratio. This figure pointed to the general shortage of nurses at all educational levels.

The Annual Report of the Virginia State Board of Nursing (1975) showed that in the area of education, while Board rules specified graduate preparation as a requirement for faculty in a baccalaureate program and some positions in associate and diploma programs, more than 58% of all nursing faculty did not hold graduate credentials.

In 1975, the Advisory Committee on Education for Health Professions and Occupations reported these data to the State Council on Higher Education for Virginia. That committee included in its report results of a survey of registered nurses who were interested in graduate level study in the Tidewater area. In general, that study showed a substantial number of registered nurses seriously interested and ready to pursue graduate education in nursing. Because of personal, employment, or geographical distance concerns, the nurses were unable to enroll in either of the on-campus graduate programs in nursing currently offered at the University of Virginia or at the Medical College of Virginia-Virginia Commonwealth University.

A survey of the southwestern Virginia area by the state Department of Health in 1976 yielded similar results. Many nurses in that area were also prepared and interested in pursuing graduate level education, but for a number of reasons, could not avail themselves of the existing programs in the state. In addition, because of the general shortage of nursing educators, there was no prospect for new master's level programs being developed at any other state schools in the foreseeable future.

Program Planning Phase

The committee that reviewed the study of the needs and interests of baccalaureate nurses for graduate education and various studies documenting the shortage of master's prepared nurses saw a number of outcomes that could be expected if the problem of the shortage of master's level nurses was addressed through off-campus programs offered by the two universities with existing graduate nursing programs. These outcomes included benefits such as an increased supply of prepared nurse educators, clinical specialists, and administrators; increased competency of those graduate education enrollees already employed in these types of positions; a strengthening of basic nursing education programs through increased competency of faculty and additional role models in clinical settings; improved management of patient care settings; and improvement in the quantity and quality of patient care services. Other research had shown that nurses who obtained their college education within a reasonable commuting distance of their residence tended to seek or retain employment in that geographical area.

Preliminary plans for the development of a cooperative effort to offer off-campus master's degrees were part of the 1975 Advisory Committee Report. The report included suggestions for the use of regional "learning centers," the augmentation of existing university based graduate faculty with adjunct "field faculty," proposals for the specific research projects that would be pertinent to an off-campus setting, and cost components for such programs.

As a result of the initial work, a grant proposal entitled Expanding Graduate Nursing Education in Virginia (University of Virginia and

Medical College of Virginia, 1975) was developed. Its purpose was to expand significantly the opportunities in graduate nursing education beyond the boundaries of the academic campuses of the University of Virginia and Virginia Commonwealth University through collaboration between the faculties of these two Schools of Nursing.

That proposal followed the lead of the Report of Needs (SCHEV, 1975) which had been issued by the State Council of Higher Education, and presented additional information on the feasibility of off-campus programs. It reported data on available faculty and existing educational resources of the colleges and universities in the state which could be used in support of off-campus efforts. It also reported statistics on existing nursing programs and clinical facilities such as hospitals, community health clinics and nursing homes which would provide potential sites for student practicum experiences. Also, state-wide library resources were canvassed.

Support of the proposed program was evident in letters from state agencies, professional organizations, and educational agencies. The State Senate passed a resolution (Senate Joint Resolution H64, 2/9/76) commending the cooperative effort and encouraging further development of off-campus graduate programs in nursing.

After documenting the need for additional graduate level education programs; demonstrating the feasibility of offering such programs off-campus; and enlisting the support of leaders in the health and educational communities, specific aims for a cooperative effort were outlined by the program planners. They are listed below:

1. To determine an organizational structure and strategies which support joint program offerings.

2. To develop a program plan for implementing a joint curriculum at the graduate level of nursing education.
3. To identify and develop the necessary resources for implementation of the proposed curriculum including instructional strategies appropriate to off-campus instruction.
4. To select sites for the implementation of the program.
5. To establish a system to evaluate the effectiveness of the proposed curriculum.
6. To implement the program as planned (p. 20).

The proposal also summarized planning activities such as determining the lines of authority and administrative responsibility; principles of operation concerning academic credit, admissions and finance; curriculum development and site selection; and the development of an instructional committee to recommend appropriate teaching methodologies to instructional faculty.

Faculty recruitment and development plans were also addressed, as were sources of long-term funding and a plan for evaluating the program effort. A detailed timetable for implementing the program included such items as recruiting a program director, faculty and students, and arranging for preliminary course offerings.

The initial plans to pursue a cooperative project were implemented in 1975. A project director was named, and two councils were appointed. The Project Advisory Council involved a statewide representation of the nursing education community to provide support and to encourage contact from outreach area nurses. The project Executive Council was charged with the responsibility of making administrative decisions and of setting policy. A joint Curriculum Committee of the two schools

of nursing was named to assist with the educational details of the proposed Outreach Program including matters of faculty, students and coursework.

A detailed curriculum plan was developed which included a tentative description of course content and a suggested sequence for a 4-5 year program.

Earlier visits (prior to project funding) to colleges and universities in both geographical areas had substantiated the willingness of those institutions' administrative representatives to share facilities and resources for Outreach Program purposes. Following grant approval, follow-up visits to these colleges and universities were planned for the purpose of specifically defining the space, library services and technological equipment and services which could be made available for use by fall 1977, and possibly during summer 1977. Initial visits to selected hospitals were also planned in Tidewater and Southwest Virginia for the purpose of exploring the possibilities of utilizing these clinical resources if they were appropriate to the Outreach Program clinical content.

In November 1976, a visit to the southwestern area of Virginia was restricted to the farthermost towns of Bristol, Abingdon, Big Stone Gap, Richlands, Marion, and Wytheville. Discussions with respresentatives of the four colleges and six major hospitals in these communities were informative, positive, and resulted in expressions of full cooperation and support to Outreach Program plans. Also, tentative plans were made for subsequent visits to hospitals which appeared to be most appropriate as clinical resources. Arrangements were made to visit colleges and hospitals in Roanoke, and later, in Radford and Blacksburg.

Considerable data regarding educational and clinical resources were accumulated and shared with the joint Curriculum Committee and the project Executive Council. Additional data on available technological resources, potential population of students and evidence of growing support for the proposed Outreach Program were also forwarded to the project Executive Council.

These efforts were completed in the first year of the planning grant. The goals for the second year were focused on implementing the curriculum with its evaluation procedures and plans for long-range program expansion.

By mid-1977, course offerings were implemented at two off-campus sites. These courses followed the decisions of the joint Curriculum Committee regarding program approval; selection and development of educational and clinical resources; recruitment and orientation of faculty; and development of program evaluation criteria. By the end of the third year of the grant, the project Executive Council reported that the major goals of the grant had been achieved.

Opportunities for nursing education at the master's level had been expanded beyond the academic campuses of the University of Virginia and Virginia Commonwealth University-Medical College of Virginia. Courses were offered in Abingdon, Hampton, Norfolk, Roanoke, and Wytheville. An advisory committee of experienced nurses and educators was appointed to give faculty level assistance to students in their local communities. Courses on alternate Saturdays were made available in Richmond. Collaboration took place between the administration and faculty of both schools and personnel from both schools worked together on committees.

In Southwest Virginia in 1977-1978, there were 53 students in the process of completing their master's program. This number represented a significant increase in the number of potential master's prepared nurses in the program area. The availability of the program increased both the interest of nurses in graduate education and the utilization of master's prepared nurses in health care agencies in the state. New master's programs were initiated in two universities in the Tidewater area and in Northern Virginia during the grant period, leaving only Southwest Virginia as the area of continuing need for master's education for graduate nurses to be provided through an outreach effort.

A request for an extension of funding was submitted and approved. This extension provided support from July 1, 1979 through December 31, 1979, and allowed for course offerings to be maintained while the activities of the initial grant project were completed. By the end of the third year of the cooperative project, students in the southwestern Virginia area had completed one-half of the program of study in Medical-Surgical Nursing.

A second grant proposal entitled Maintaining Graduate Education in Southwest Virginia (Johnson, 1979) was funded early in 1980. The purposes of this project were to provide assistance in continuing the ongoing Outreach Program effort in Southwest Virginia and to plan an evaluation of its effectiveness. The goals of that grant are listed below.

1. General expansion of opportunity for graduate education in the program region.
2. Primary training focus of medical-surgical nursing with secondary focus in education, clinical specialty, and administration.

3. Development of faculty members and additional graduate level educated nurses for service in the rural setting.
4. Providing a positive impact on the overall quality of nursing care in the rural area.
5. Preparation of leaders for the rural nursing community.
6. Eventual increase in the involvement of graduates in professional and health care related organizations.
7. Development of additional information in graduate nursing education.
8. Determining the effectiveness of offering graduate nursing education as an Outreach Program rather than developing a new program on-campus (Johnson, 1979).

A major segment of the evaluation effort addressed in that grant proposal culminates with, and is described in this report. The remainder of this report describes the details of the evaluation project, its findings and conclusions.

SECTION II

PROGRAM DESCRIPTION

The following pages include a description of the geography of the Outreach Program area and the group of nurses from which the first class was selected. Overall course offerings, faculty employed, and enrollments are also described.

Program Setting

The map on the following page (Figure 1), shows the location of teaching sites throughout Southwest Virginia. In addition to the 1979 Summer Session instruction which was offered at the University of Virginia's main campus in Charlottesville, instruction occurred at teaching sites in Abingdon, Roanoke, Salem, Wytheville and Radford, Virginia and Johnson City, Tennessee.

The Outreach Program enrolled students from a large geographical area involving twenty-six counties in Virginia. While the majority of students lived in Virginia, several came from upper east Tennessee, two were from North Carolina, and one came from Kentucky. During the first course offering, when a centrally located site was selected at Wytheville, some students had to drive three and one-half to seven hours round trip to attend classes. For many students this travel was over secondary roads in a mountainous terrain. In addition, weather conditions in this part of the state included fog, rain, snow and ice, depending upon the season of the year.

Based on the distances and difficulty of travel for the students, it was decided that courses would be offered in more than one site when

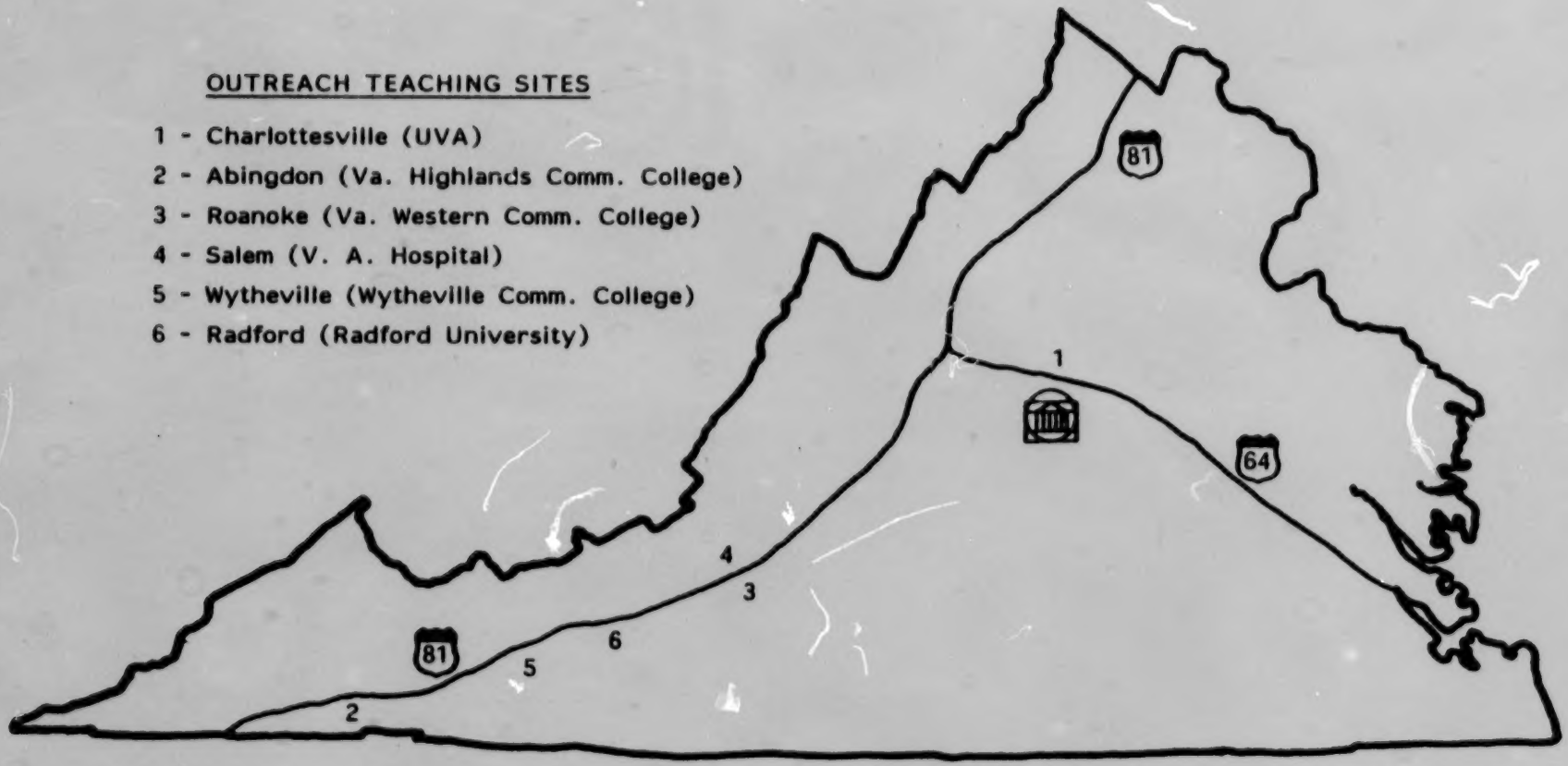


Figure 1. Outreach Teaching Sites

possible. Sites were selected in Abingdon and one of three sites situated in the more eastern section of this part of the state.

Faculty members traveled regularly from Charlottesville to the various teaching sites during the instructional phase of the Outreach Program. In addition, advisory committee members, part-time faculty from other institutions and clinical preceptors scattered throughout southwestern Virginia and upper eastern Tennessee areas traveled to various teaching sites to assist in instruction. The travel time for faculty and others involved with the program ranged from two and one-half to five and one-half hours one way. The time spent in travel meant that time could not be spent in other areas of faculty responsibility. It also required faculty members to spend the night at the site farthest from Charlottesville, thus using two days solely for travel.

During the initial year of course offerings, 1977-1978, several attempts were made for airplane travel to the southwest area, both for class sessions and advisory committee meetings. Because of the weather and terrain, however, the air travel never materialized. Each flight was cancelled either because the plane could not leave Charlottesville or could not land at Wytheville.

During the first year of the grant, Maintaining Graduate Education in Southwest Virginia (Johnson, 1979), arrangements were made to have a driver for the automobiles taking faculty to the class sites. This provided time for the faculty to complete some faculty responsibilities during the weekly or bi-weekly two-day trip.

Students

In the Fall of 1977, fifty-three students enrolled in the first courses to be offered in the Southwest Virginia area. The courses offered were GNUR 730-Medical-Surgical Seminar I and GNUR 731-Medical-Surgical Practicum I, with each course carrying two semester hours of credit.

While none of the fifty-three students enrolled in the first courses was formally admitted as graduate students, each was in the process of completing the application requirements. Restricting course enrollment to only those students who were fully admitted would have postponed course offerings until the spring semester of 1978. Therefore, the students were enrolled in the first two courses as Special Students, thus allowing both an earlier starting date for course offerings and the enrollment of a larger number of potential students. The students were able to use the experience to weigh the "pros" of graduate study in nursing against the "costs" in terms of time, money, energy, job and family responsibilities and conflicts. In addition, the students were able to demonstrate their ability to meet the expectations for graduate study in nursing and could make their own decision, with faculty advising, to complete the application for graduate student status or to discontinue the application process at that time.

Prior to the 1979 on-campus summer session, the courses offered in the Outreach Program were open for enrollment to Special Students. This was consistent with the use of this student category for on-campus students as well. The on-campus summer session was restricted to those students who had been admitted to graduate student status in the Medical-Surgical Nursing major.

Course Offerings

The on-campus graduate medical-surgical nursing program was a 39-42 credit hour program normally completed in four semesters, with a minimum of two semesters spent in full-time study. The Outreach Program was designed so that students could attend school on a part-time basis, while maintaining their full-time positions. The courses, scheduled to run over a four year period, began in the fall of 1977 and ended in the spring of 1981. A full list of Outreach Program courses is provided in Figure 2.

Enrollments

Enrollment data for the Outreach Program are depicted in Table 1 by semester and site. Courses were offered weekly or bi-weekly, at different sites in Southwest Virginia. These sites included: Abingdon, Roanoke, Salem, Wytheville, and Radford.

The data in Table 2 depict the enrollment in the Outreach Program by dividing them into categories of admissions, graduates, and expected graduates. The students in the Outreach Program were all enrolled in part-time study since they were enrolled in fewer than nine semester hour credits per semester.

The enrollment in the Outreach Program leveled off from 53 students during the first year to 34 students during 1980-1981. This decrease reflects attrition due to some students who elected to come on-campus for full time study and to other students who dropped out of the program because of personal reasons. The most frequent personal reason for withdrawing from the program was family responsibilities. This included a husband being transferred to another state for employment, husband's employment demands, and increased need for financial support of college bound children.

1977-1978

Fall	Spring	Summer
[1] GNUR 730-Medical-Surgical Nursing Seminar (2)	GNUR 510-Introduction to Statistics (3)	[2] GNUR 860-Introduction to Research (3)
[1] GNUR 731-Medical-Surgical Nursing Practicum (2)		

1978 - 1979

[2] GNUR 775-Human Physiology I (3)	[2] GNUR 776-Human Physiology II (3)	[2] GNUR 582-Basic Supporting Sciences (2)
		[1] GNUR 572-Primary Skills in Adult Health Sem.(2)

1979 - 1980

[1] GNUR 741-Medical-Surgical Nursing Practicum II (2)	[1] GNUR 740-Medical-Surgical Nursing Seminar II (3)	[2] GNUR 861-Research Design (3)
	[3] GNUR 750-Administrative Theory	[2] GNUR 896-Project Guidance (2)
	[3] GNUR 701-Teaching Strategies (3)	[2] GNUR 898-Thesis Guidance (2)
	[3] GNUR 703-Curricula in Nursing (3)	

1980 - 1981

[3] GNUR 701-Teaching Strategies (3)	[3] GNUR 702-Sem. & Prac. in Tchg (3)
[3] GNUR 703-Curricula in Nursing (3)	[3] GNUR 742-Clinical Spec. I (3)
[3] GNUR 742-Clinical Spec. I (3)	[3] GNUR 743-Clinical Spec. II (3)
[3] GNUR 743-Clinical Spec. II (3)	[3] GNUR 752-Sem. & Prac. in Admin. (3)
[3] GNUR 751-Admin. Strat. in Nursing (3)	[2] GNUR 896-Project Guidance (2)
[2] GNUR 896-Project Guidance (2)	[2] GNUR 898-Thesis Guidance (2)
[2] GNUR 898-Thesis Guidance (2)	

[1] - Major Courses
[2] - Supporting Courses
[3] - Minor (Admin., Educ., Clinical Spec.)

Figure 2. Outreach Course Offerings

Table 1

Outreach Graduate Nursing Program Fall 1977-Spring 1981
Enrollment by Semester and Site

Semester	Course	Credit	Enrollment	Site
Fall, 1977	GNUR 730	2	53	Wytheville
	GNUR 731	2	53	Wytheville
Spring, 1978	GNUR 510	3	17	Roanoke
	GNUR 510	3	18	Abingdon
Summer, 1978	GNUR 860	3	18	Abingdon
	GNUR 860	3	9	Roanoke
Fall, 1978	GNUR 775	3	29	Abingdon
	GNUR 775	3	19	Roanoke
Spring, 1979	GNUR 776	3	29	Abingdon
	GNUR 776	3	19	Roanoke
Summer, 1979	GNUR 562	2	40	On-Campus
	GNUR 572	4	40	On-Campus
Fall, 1979	GNUR 741	2	25	Abingdon
	GNUR 741	2	11	Roanoke
Spring, 1980	GNUR 740	3	13	Roanoke
	GNUR 740	3	19	Abingdon
	GNUR 750	3	12	Abingdon
	GNUR 701	3	6	Roanoke
	GNUR 703	3	7	Abingdon
Summer, 1980	GNUR 861	3	8	Roanoke
	GNUR 861	3	18	Abingdon
	GNUR 896	2	7	Roanoke
	GNUR 896	2	19	Abingdon
	GNUR 898	2	1	Roanoke
Fall, 1980	GNUR 701	3	9	Abingdon
	GNUR 703	3	2	Roanoke
	GNUR 742	3	2	Roanoke
	GNUR 743	3	1	Roanoke
	GNUR 751	3	12	Abingdon
	GNUR 896	2	24	Rnk/Abdn
	GNUR 898	2	2	Rnk/Abdn
Spring, 1981	GNUR 702	3	9	Abingdon
	GNUR 702	3	7	Salem
	GNUR 742	3	1	Roanoke
	GNUR 743	3	1	Abingdon
	GNUR 752	3	11	Abingdon
	GNUR 896	2	4	On-Campus
	GNUR 896	2	3	On-Campus
	GNUR 896	2	6	On-Campus
	GNUR 896	2	1	On-Campus
	GNUR 896	2	1	On-Campus
	GNUR 898	2	1	On-Campus
	GNUR 898	2	3	On-Campus

Table 2

Students Enrolled in Outreach Program

	Academic Year				
	1977-1978	1978-1979	1979-1980	1980-1981	1981-1982
Number Enrolled	53	42	36	34	9
Number Graduating	0	0	0	22	-
Expected Graduations	-	-	-	-	9

The number of projected students graduating from the Outreach Program represents a 58% (31 students) completion rate of students admitted and completing the program. This percent does not reflect those students who transferred on-campus and who subsequently completed the program.

As may be seen in Table 3 the initial group of students enrolled in the program during the first two years represented a variety of fields of employment. Eighty-five percent of the Outreach students were employed full time in nursing at the time of their admission to the program.

Faculty Employed

Graduate faculty from the University of Virginia School of Nursing taught the majority of courses in the Outreach Program. Nursing faculty, other than those directly involved in teaching, generally participated in various activities related to the Outreach Program. While the involvement may have been limited to telephone contact with the students, it could have also included clinical conference presentations in the area and/or committee membership on an Outreach student's thesis or project. Where at all possible, support courses were taught by qualified faculty from colleges and universities in the Outreach site areas. The courses in both the major and minor were taught by graduate faculty from the School of Nursing. Table 4 presents a complete list of the Outreach faculty with respective courses taught and institutional affiliation at the time of the course offering. Students in the Outreach Program came on-campus during the Summer of 1979 to complete a six credit hour coursework requirement. Typically, Outreach students completing their master's degree in Spring of 1981, started their program in Fall 1977.

Table 3

Outreach Students by Field of Employment, 1977-1978

Field of Employment	1977-1978 Number of Students
Staff Nurse	
Hospital	8
Community Health Agency	4
Long Term Care	1
Education Programs	
LPN	1
Diploma	3
ADN	14
BSN	5
Administration	
Hospital	4
Community Health Agency	1
Unemployed	5
Other	7
Total	53

Other category included staff development, discharge planning, school nurse and/or inservice education positions.

Table 4

Outreach Faculty by Course Offering and Institutional Affiliation

Faculty	Course(s)	Institutional Affiliation
Anderson, Lisa:	GNUR 741 (2)*	University of Virginia
Bancroft, Barbee:	GNUR 572	University of Virginia
Bancroft, Judith:	GNUR 702 GNUR 703 (2)	University of Virginia
Blevins, R. Dean:	GNUR 775 GNUR 776	East Tennessee State University
Bohannan, Thomas:	GNUR 510	Appalachian State University
Chioni, Rose Marie:	GNUR 898	University of Virginia
Clore, Ellen:	GNUR 572	University of Virginia
Crosby, Marian:	GNUR 701 (2) GNUR 702	University of Virginia
Ergle, William:	GNUR 510	Roanoke College
Fay, Francesca:	GNUR 742 GNUR 898	University of Virginia
Gleit, Carol:	GNUR 896	University of Virginia
Gray, Margaret:	GNUR 740 (2) GNUR 896	University of Virginia
Houston, Charles:	GNUR 860 GNUR 861	Virginia Western Comm. College
Johnson, Karen:	GNUR 730 GNUR 731 GNUR 750 GNUR 896 (5) GNUR 898 (2) GNUR 742 GNUR 743 GNUR 751 GNUR 752	University of Virginia
Knight, Pat:	GNUR 861	Appalachian State University
McCoy, Gene:	GNUR 775 GNUR 776	East Tennessee State University
Parsons, L. Claire:	GNUR 896	University of Virginia
Ropka, Mary:	GNUR 742 GNUR 743	University of Virginia
Rowell, Patricia:	GNUR 572	University of Virginia
Shepard, Robert:	GNUR 860	East Tennessee State University
Taylor, Ann:	GNUR 896	University of Virginia
Wolf, Wendy:	GNUR 562	University of Virginia

*Number of times course taught by faculty member during Outreach Program.

Summary

The Outreach Program has been described in this section through the program setting, the curriculum and the program participants. Included in the program setting was a description of the Outreach sites as well as the geography and travel conditions peculiar to this setting. A brief description of the Outreach curriculum and Outreach faculty was presented in this section as well as enrollment and other descriptive data related to the students involved.

SECTION III
EVALUATION APPROACH

Although evaluation has become an accepted part of educational planning and program implementation, it is, nevertheless, important to focus on the general purposes for conducting an evaluation and on the approach used in the evaluation of the University of Virginia Outreach Program. This section does not include evaluation methodology since it is included in each section of the various components of the program evaluation. The purpose of this section is to describe the approach and structure of evaluating the Outreach Program.

Purposes for Evaluation

In general evaluations are done to determine the effectiveness of programs, that is, to make judgements about whether the program objectives have been met (Dressel, 1976). Also, evaluation results become available as part of the literature and provide direction for other programs with similar goals.

This general goal, to measure effectiveness, was one focus of the Outreach Program. Particular expectations had been spelled out by those who contributed to the initial plans for off-campus program implementation, and the question as to whether those expectations had been met needed to be addressed.

Another purpose for conducting an evaluation is to determine whether program plans which spell out a series of objectives (intended outcomes, anticipated results) are consistent with the actual results observed after program completion. Evaluations that concentrate on

comparing pre-program expectations with post-program outcomes rely on a discrepancy approach (Provus, 1971).

A third issue that points to the need for evaluation is the notion of accountability. Have the resources expended on the project been put to good use? Can the costs of the program be justified? Does the budget represent an efficient use of financial resources? Such questions can be addressed in an evaluation plan that focuses on a cost-benefit measure of efficiency (Scriven, 1974). Cost/benefit studies lead to decisions whether particular programs are self-supporting or cost effective enough to justify their continuance. For the Outreach Program it was necessary to determine whether the resources expended represented a cost greater or lesser than other programs spent to achieve similar objectives.

A fourth consideration for this evaluation effort concerned the unique types of benefits which were expected to result from off-campus instruction. Because of the innovative nature of this program, little comparison data on the positive outcomes of similar programs were available. Therefore, particular attention was paid to collecting information from all groups who had been involved in the program with the aim of describing comprehensively the positive outcomes of the program.

The broad outlines of the program evaluation encompassed the outcomes that had been anticipated in program planning documents; the positive goals or products of the program (as contrasted with the results of a process evaluation); and the overall efficiency of program implementation, with particular attention to the unique costs generated in off-campus evaluation.

Evaluation Approach

In developing a frame of reference from which to structure the process of evaluating the Outreach Program (see Figure 3), project staff undertook a review of the literature in higher education, evaluation, and graduate nursing. The focus of this literature review was based on the results of an analysis of the purposes, goals and objectives of both the original and the maintenance grants by the Project Director and Evaluation Consultant. This review yielded information which was included in several position papers describing the "state of the art" in the evaluation of off-campus programs similar to the Outreach Program. After the literature reviews, a decision was made to assess the program by approaching the evaluation issues of effectiveness, costs, benefits, negative outcomes and overall program accountability.

The planning documents and grant proposals upon which the Outreach Program was based were again reviewed. Program objectives and anticipated outcomes were listed as focal points for the evaluation design. The study of costs and benefits was structured around the actual expectations of program planners and administrators in combination with the general expectations which the literature review had suggested for similar programs, while the study of negative outcomes followed the collection of data from program participants.

For the purposes of the evaluation, effectiveness, costs, benefits, negative outcomes, and overall program accountability were defined as follows:

Effectiveness: The degree to which program goals and expectations have been met.

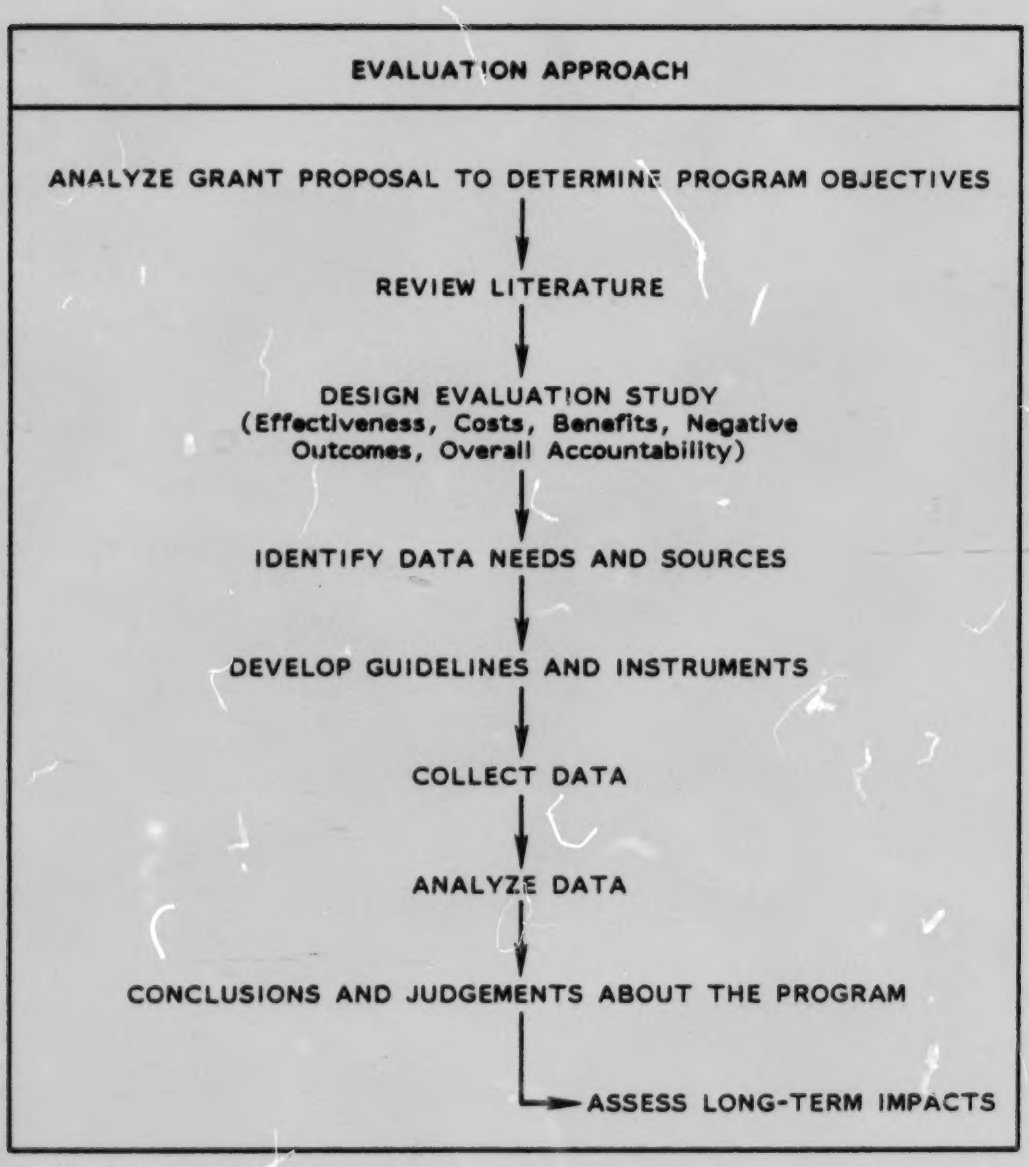


Figure 3. Evaluation Approach

Costs: The amount of resources expended in support of the educational program activity.

Benefits: The positive results or outcomes which can be anticipated from participation in or exposure to an educational program.

Negative outcomes: The negative results or outcomes which can be anticipated from the participation in an educational program. These may include personal losses or sacrifices of opportunities to gain resources.

Program accountability: An overall judgment which considers attainment of program goals and objectives in relation to costs, benefits, and negative outcomes. In essence, was the value of the program to individuals, groups and institutions worth the expenditure of fiscal and human resources.

Summary

The design of the evaluation project was summarized in Figure 3. The evaluation approach included an analysis of the grant proposal to locate program objectives; a review of selected literature in the area of higher education, graduate programs and off-campus instruction in nursing; and an evaluation design with definitions of data elements. The routine steps of identifying data needs and sources, designing data collection instruments and collecting and analyzing the data were planned to precede conclusions about the program future and judgements about its impact. An assessment of long term program impacts was also included. Details on formulation of cost data, results of surveys and interviews, and conclusions about program outcomes are described in the remainder of this report.

SECTION IV
EFFECTIVENESS

As defined in Section III, effectiveness describes the degree to which program goals and expectations have been met.

The eight major objectives listed as part of the grant proposal which described the University of Virginia Outreach Program ("Maintaining Graduate Education in Southwest Virginia") are repeated below, along with the methodology used in the assessment of the degree to which they have been met.

Major Objectives

OBJECTIVE #1: General Expansion of Opportunity for Graduate Education in the Program Region

In order to determine whether this objective had been met, data from the initial feasibility study were used to describe the educational opportunity available to those nurses in Southwest Virginia desiring a master's degree prior to the implementation of the Outreach Program. Additionally, students and community members involved in the Outreach Program were surveyed and interviewed by the evaluation team in reference to the program objectives. Finally, enrollment data were used in assessing this objective.

Before the Outreach Program came to Southwest Virginia, prospective master's degree students had traveled to Richmond or Charlottesville to attend full-time programs, or out of state to Tennessee or North Carolina. Nurses who wished to attend graduate school on a part-time basis while maintaining their jobs in Southwest Virginia had no such option.

It was the unanimous conclusion of those who completed the program that both the location of the program and its structure (in terms of scheduling) had allowed them an opportunity not otherwise possible to expand their education. This conclusion was echoed by members of the program advisory committee and supports the contention that the establishment of the University of Virginia Outreach Program was successful in providing an opportunity for graduate education in Southwest Virginia. Over fifty nurses took advantage of the program, and more than thirty of them completed a degree.

OBJECTIVE #2: Primary Training Focus of Medical-Surgical Nursing with Secondary Focus in Education, Clinical Specialties and Administration

The assessment of this objective was accomplished through the collection of data on course offerings and clinical experiences. The curriculum was reviewed in order to determine the training focus.

Outreach course offerings and the curricular direction of the entire program were structured around Objective #2. In the 1977-78 program year, two seminars were offered in medical-surgical nursing. Students were able to enroll in the course "Primary Skills in Adult Health" in the second year of the program (1978-79). Two advanced courses on topics in medical-surgical nursing were available in the third program year (1980-81) to complete the major field of emphasis.

Courses in the theory and strategies of administration were offered in the final two years of the program, as was a seminar and practicum experience in nursing administration. For the education minor, courses were offered in teaching strategies and curriculum, and a practicum experience was scheduled for education minors in the final year of the

program. Courses in clinical specialties were available during the fall and spring semesters of the 1980-81 academic year.

All students completed the program with a major in Medical-Surgical nursing, and students were graduated in each of the three minor areas of administration, education and clinical specialty.

OBJECTIVE #3: Development of Faculty Members and Additional Graduate Level Educated Nurses for Service in the Rural Setting

Data on Outreach students employment during and after their involvement in the Outreach Program were analyzed to assess the achievement of the third objective.

Since almost all of the nurses enrolled in the Outreach Program maintained their jobs while they were students and remained in the program area after program completion, the third objective was a natural outgrowth of the program's existence. Those who were faculty members before the Outreach Program remained as teachers, putting their advanced education to use as each learning experience occurred. The master's degree qualified them to teach in existing baccalaureate and associate degree programs in the area, as well as making the establishment of new programs a more feasible alternative in the future. Hospital nurses and administrators became qualified, as a result of the program, for higher level positions in the communities where they worked.

OBJECTIVE #4: Providing a Positive Impact on the Overall Quality of Nursing Care in the Rural Area

This objective speaks to one of the more difficult issues for program evaluation, i.e., assessing the long-term results of an educational

program. In the short run it is possible to conclude that the existence of the Outreach Program and the graduate level nurses it produced will provide a nucleus of talent to raise the quality of nursing care in Southwest Virginia. However, more specific measures of increases in "quality of care" must await the passage of time when particular long term results of the educational program can be measured.

OBJECTIVE #5: Preparation of Leaders for the Rural Nursing Community

Since the program has been completed only recently, it is premature to address the leadership roles which may be taken by nurses who had the experience of the Outreach Program. Like Objective #4, this objective should be assessed from more of a long-term perspective.

OBJECTIVE #6: Eventual Increase in the Involvement of Graduates in Professional and Health Care Related Organizations

This objective, like the previous two, must await long term assessment. Limited evidence is available, however, that Outreach students have begun to become involved in nursing organizations as a result of their educational experience. A further assessment of this trend must occur in the future, since some nurses also reported having to decrease their involvement in professional organizations as a result of the busy schedule of school and work. Recovery of this prior involvement may be a confounding issue in attributing involvement to the educational program.

OBJECTIVE #7: Development of Additional Information in Graduate Nursing Education

This objective pertains most clearly to the knowledge to be gained by the faculty of the University of Virginia School of Nursing about

improved techniques and strategies for conducting programs off-campus. Faculty members were interviewed to determine whether teaching techniques or curricular materials for the Outreach Program would be available or helpful to the on-campus program. The report of the faculty indicates that not only did the program provide a practical "proving ground" for theories about off-campus instruction, but also, that it provided an arena to test teaching arrangements yet to be tried in the on-campus curriculum. In addition, the knowledge gained in the Outreach Program is already being disseminated to nursing educators nationally both through conference presentations and in formal publications.

OBJECTIVE #8: Determining the Effectiveness of Offering Graduate Nursing Education as an Outreach Program Rather than Developing a New Program On-Campus

As data on earlier objectives made clear, the expansion of opportunity for graduate nursing education in Southwest Virginia and the resulting higher level of nursing skills in the area could not have been realized by providing a new program on-campus in Charlottesville. Whether full or part-time, such a program would have been geographically removed from those students who needed it most. The Outreach Program made possible what on-campus programs could not: an opportunity for graduate education for working nurses in an area remote from the main university setting.

Summary

As the first graduates of the program completed their studies, five objectives (i.e. numbers 1, 2, 3, 7, 8) have been met. Three other objectives (i.e. numbers 4, 5, 6) are concerned with the long-term

impact of program involvement upon students and the health care system in which they work as nurses. A "Long-Term Impact Survey" (Appendix D) will be distributed in Spring 1982 to assess them. The list below separates the program objectives into those which have been met and those yet to be met.

Program Objectives

A. Have Been Met:

1. General expansion of opportunity for graduate education in nursing in the program region.
2. Primary training focus of medical-surgical nursing with secondary focus in education, clinical specialties, and administration.
3. Development of faculty members and additional graduate level educated nurses for service in the rural setting.
7. Development of additional information in graduate nursing education.
8. Determining the effectiveness of offering graduate nursing education as an Outreach program.

B. To Be Met:

4. Providing a positive impact on the overall quality of nursing care in the rural area.
5. Preparation of leaders for the rural nursing community.
6. Eventual increase in the involvement of graduates in professional and health care related organizations.

SECTION V

COST OF OUTREACH PROGRAM

This section of the Evaluation Report includes detailed descriptions of the guidelines used to determine direct instructional costs of the off-campus program. The purpose of this section is to apply these guidelines to actual cost data which will yield figures such as direct instructional unit costs using student credit hours, and average academic degree program costs for a student; including direct instructional costs of major, minor, and supporting courses.

Caution should be exercised in interpreting the cost figures of this program with any other cost figures, as costing definitions, methodologies, and applications may differ significantly. Identifiable expenditures for maintaining an off-campus program are necessarily exclusive of many indirect costs which would be included in determining the total instructional expense of an on-campus program. For example, cooperation from schools and agencies in Southwest Virginia has allowed the program to exist at a price not likely to be duplicated in other off-campus programs.

Using Cost Information: Selected Literature

The cost analysis, as described in this section of the report, will be used as a measure of program efficiency as well as yielding other useful conclusions regarding the Outreach Program. A brief review of the literature on cost analyses suggests varied uses for cost data.

As defined by the State Council of Higher Education for Virginia (1981), "Cost analysis measures the current costs of various units of

existing activities" (p. 1). Internally, cost analysis can be used as a planning and management tool which enhances decision making. Knowledge of present cost makes available descriptive data about an institution's allocation and consumption of resources. By using cost data, decision makers can assess the implications of educational alternatives. Management can monitor cost information and, if necessary, alter resource allocations to reflect the expansion or reduction of academic programs. Cost information helps institutions make comparisons with cooperating institutions. As a basis for external funding, cost data are used to determine funding support levels and to justify budget requests. Cost data related to efficiency, effectiveness, or productivity are used to promote accountability in higher education (Hample, 1980).

Cost analysis can also facilitate more accurate estimates of future resource levels. According to Balderston (1974), cost analysis is useful for:

1. Operating and management;
2. Providing critical inputs for planning major changes in capacity, program structure, or institution policies;
3. Obtaining comparisons between institutions, to help us share insights about what targets to set;
4. Justifying to funding sources (public and private) what prices we charge for educational and institutional services and what resources are needed; (p. 141)

and should answer the following questions in order to provide meaningful information to the decision makers:

1. What resources are being absorbed?
2. How does resource use vary with changes in the volume of activity?

3. Is the pattern of resource use efficient?

4. What is the trend over time? (p. 147)

Due to the limitations involved in measuring educational outcomes, cost studies are generally limited to the study of functions where there is a known unit of measure. The problems and issues surrounding the process of cost analysis are varied, but appear to center around the issues of: 1) a lack of standardization of items and the consequent difficulty in measuring these terms, and 2) the inability of the organization to provide useful cost information to the user (decision maker). Because of the present limitations of many cost analysis techniques, much cost data cannot be used for inter-institutional comparability of costs.

The development of useful cost analysis techniques is necessary because of the demands placed on higher education for accountability, quality decision making, and increased competition for limited resources. Unfortunately, recent developments in cost analysis using "universal procedures" have proven to be limited in their usefulness. As the Change Panel on Academic Economics (1976) states, "We [higher education] are on the way to knowing the cost of everything and the value of nothing" (p. 39). Cherrington (1979) suggests that the concept of cost analysis in the academic world must combine the 'numbers' with an understanding of the goals and objectives of the institution. To accomplish this difficult task, the cost analysis technique needs to be matched both to the administrator's question and to the decision which is being made. A general framework of cost analysis may be useful, provided it has the necessary flexibility to adapt itself to the particulars of a situation.

Definition of Cost Terms

In order to have a clear understanding of the cost findings, it is important to first establish the definitions of terms used in this costing approach.

As indicated previously, the cost analysis was expected to yield data on unit costs and to approximate the costs of operating an off-campus graduate nursing program, thereby providing essential information regarding the feasibility of continuing such a program. In accordance with these expectations, appropriate guidelines were developed for use in the cost study. These guidelines are reflected in the costing terminology presented in the following section.

Costs. There are a variety of terms used in cost studies to describe costs. Illustrating the numerous modifiers for the term "cost" Matz, Curry and Frank (1962) indicate that:

> An analysis ... reveals that there are many types of cost. The historical meaning of the term "cost" is modified by such descriptions as direct, prime, indirect, fixed, variable, controllable, product, joint, estimated, standard, future, replacement, opportunity, inputed, sunk, differential, and out-of-pocket. Each modification implies a certain attribute which is important not only to the cost accountant who uses the concept, but also, to business management to whom these costs must convey a specific meaning and message. An abstract definition of cost is not sufficient for an understanding of the term. A cost must be understood in its relationships to the purpose or purposes for which it is to serve. (p. 22)

For purposes of their study, Ziemer, Young, and Topping (1979) define costs as "the measure in dollars of institutional resources used in the process of providing institutional outputs during a given time period" (p. 10). The definition of cost employed in the analysis of the University of Virginia's Outreach Program conforms closely to this definition.

Opportunity costs. An opportunity cost refers to the opportunities lost whenever a decision is made to expend resources. These lost opportunities are sacrifices made by reason of the decision. As mentioned by Bowen (1980), the monetary costs of higher education may not account for the opportunity costs of the resources employed. Also referred to as real costs, the opportunity costs may be monetary or non-monetary. For example, in the Outreach Program opportunity costs are used in the cost section to refer to faculty time lost due to travel to the Outreach sites. Although monetary costs will be used in this study, an awareness of other measures of cost is beneficial.

Direct costs. The American Council on Education (1965) defines direct costs as costs "readily assignable to a specific cost objective as an ordinary part of its operation" (p. 4). Hample (1980) defines direct costs as those costs having an "obvious direct relationship to the instructional product and which can be defined as those costs which would be directly and immediately affected by enrollment changes" (p. 2). The direct cost of an activity is the total sum of resources which are directly consumed by the activity (Change, 1976).

As mentioned previously, the activity (or cost objective) being studied is off-campus nursing instruction. Direct instructional costs will be determined using ACE's definition of direct costs as "costs readily assignable to a specific cost objective as an ordinary part of its operation." Instructional salaries, secretarial support, student support services, other contractual services, supplies and equipment will be included as direct instructional costs of the off-campus program. In addition, travel expenses incurred for instructional activities in the off-campus program will be considered to be a direct cost, due to their direct relationship to the activity.

Instructional costs. Instructional costs are direct costs that describe the amount of resources expended for non-research, non-public service activities. They are the costs incurred helping students meet "specified formal curricular requirements, leading to a particular degree or certificate granted by the institution" (Ziemer, Young and Topping, 1971, p. 27). In the Outreach Program, instruction is offered via courses which include clinical experiences. The Institute of Medicine (1972) established that clinical costs be included in instruction for schools of nursing where clinical teaching is conducted in facilities established primarily for teaching purposes. Since clinical experiences for off-campus nursing students take place in a variety of settings, clinical costs will be limited to the cost of the clinical preceptor. Turning instructional costs into meaningful information requires that the costs of instruction be related to the number of units of service rendered. (Bowen, 1980).

Unit costs. A unit cost is a "quantified value of the resources invested and expended, divided by a standard measure of outcome such as contact period, credit, major program, curriculum, or student" (Witmer, 1972, p. 99). Sometimes referred to as average costs, they are "the total cost attributed to a cost center divided by the total number of units of output produced by that cost center" (Ziemer, 1971, p. 285). The direct instructional unit costs for the Outreach Nursing Program will be related to student credit hours and the academic degree program requirements.

Enrollment. The National Center for Higher Education Management Systems (1978-79) defines enrollment as "the duplicated number of students enrolled in courses as of an official census date, by unit/department of instruction or by student programs" (Sherrill, p. 79).

Student credit hours. Student Credit Hours constitute:

> A unit of measure that represents one student engaged in an activity for which one hour of credit toward a degree or other certificate is granted upon successful completion. Total student-credit hours for a course are calculated by multiplying the course's credit-hour value by the number of students enrolled in the course. (Sherrill, p. 80).

Degree program. The State Council of Higher Education for Virginia (1979) defines a degree program as a "logical combination of courses with concentration in a single or several discipline areas" (p. 23). In this report, a degree program refers to the 39-42 credit hour off-campus graduate nursing program. There are four components to the Outreach Program: major courses, supporting courses, minor

courses, and electives. Since elective courses were not offered through the Outreach Program, this component will not be considered. The major consists of 13 credit hours of coursework; the supporting area requires 18 credit hours; and the minor area is 6-9 credit hours depending on the choice of specialization; i.e. administration (9), education (9), clinical specialization (6).

Faculty salary and workload. As faculty salaries comprise a major portion of direct instructional costs, the appropriate distribution of faculty costs to the program is accomplished through an analysis of faculty workloads. As SCHEV (1979) reports there are several methods used in the distribution of faculty costs; some using the time expended in an activity and others based upon effort involved in the activity. For instructional faculty, with the exception of the Program Director, costs were distributed using designated efforts (% of time allocated to off-campus instruction) as reported in the faculty workload grant reports. Due to the nature of the Program Director's involvement in the program, a percentage breakdown of effort for the distribution of costs was developed reflecting the varied responsibilities of the position. The breakdown allowed for variations in cost distributions to the program based on assigned teaching responsibilities each semester.

Cost objectives (program classification structure). In order to begin a cost study, an appropriate cost objective needs to be defined. The National Association of College and University Business Officers (NACUBO) describe a cost objective as a "defined entity to which cost is related, ... and can be an organizational unit, a project, responsibility center, function, program, or some other identifiable entity" (SCHEV, 1979). The Virginia Program Classification Structure (PCS)

details such a taxonomy of cost objectives. The PCS is presented in Figure 4. As reported by SCHEV (1979), the PCS provides a standard procedure to assign information regarding institutional resources and activities. In this study, the PCS will be used to record actual direct instructional expenditures for the Outreach Program. In order to determine a direct instructional cost, expenditures will be assigned under the categories of (1.0) Instruction and (4.0) Academic Support.

Guidelines. As used in this study, guidelines refer to the procedures or methodology used to derive the direct instructional costs of the Outreach Program. A guideline suggests a flexibility in methodology as opposed to the exactness of a formula.

Methodology

In order to develop meaningful cost information, the calculation of direct instructional costs for the Outreach Program followed the guidelines formulated in the Program Classification Structure (PCS). The structure of cost objectives, as defined by PCS, became the framework to which expenditures ($) were attached. Average direct instructional costs were computed for the outputs of student credit hours, courses in program major, minor and supporting areas and per graduate. Unit costs were developed by quantifying these outputs for each cost objective.

Enrollment and cost data were collected from monthly financial reports at the University of Virginia and Virginia Commonwealth University-Medical College of Virginia Schools of Nursing's fiscal offices, the University of Virginia's Division of Continuing Education and its Office of Sponsored Programs.

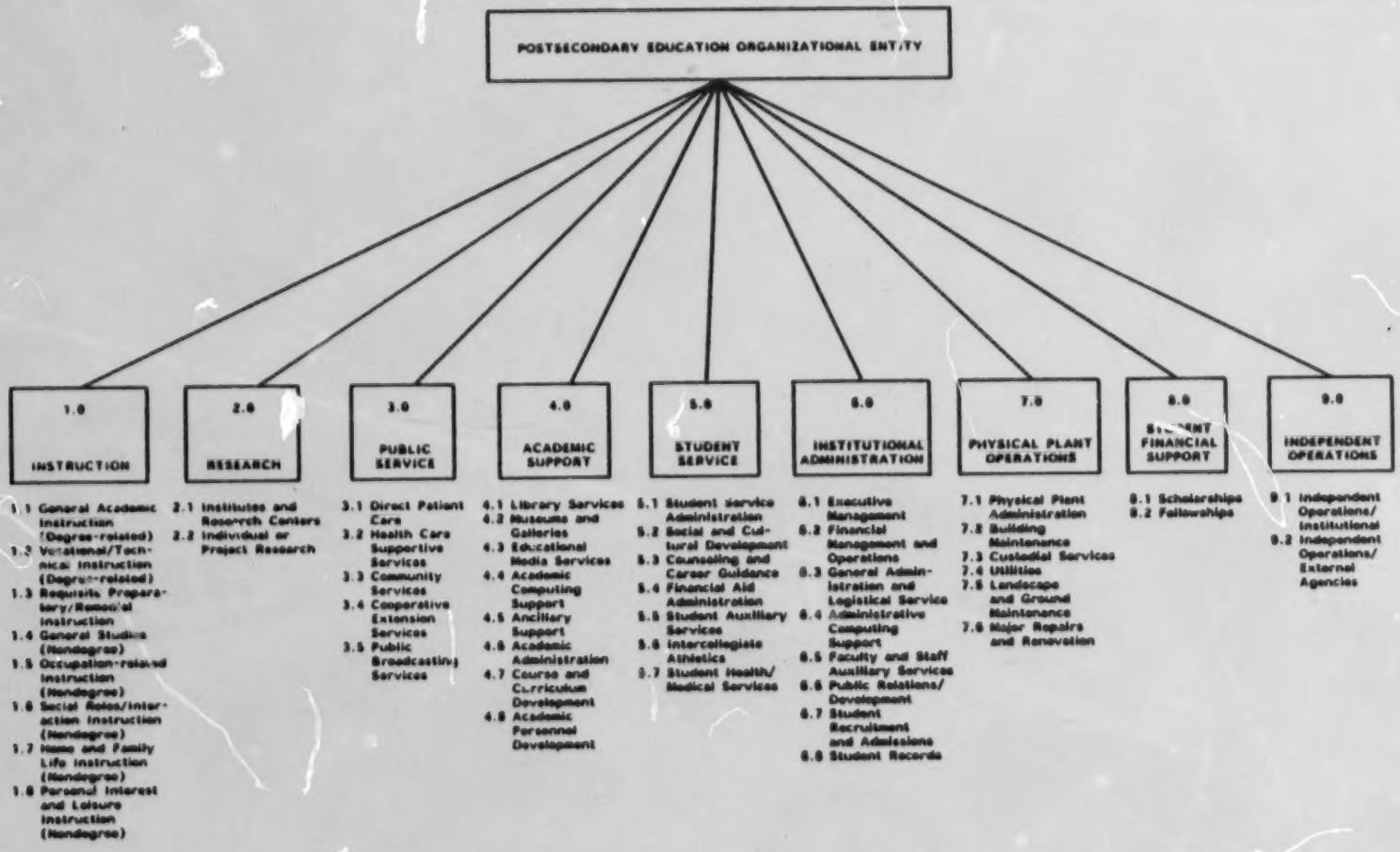


Figure 4. Program Classification Structure

Data on enrollment were used along with the credit hours of courses offered in the program to produce student credit hours, a commonly used measure of instructional output. Table 5 provides enrollment information for the off-campus program, depicting the sequence of courses, course credit, course enrollment, instructor's name, course location and student credit hours. The data in Table 5 are used in the determination of direct instructional costs.

The direct costs of instruction consisted of specific costs related to this program. These costs were assigned to the PCS categories of (1.0) Instruction and (4.0) Academic Support. Direct instructional costs for the off-campus program included: salaries for faculty and other instructional personnel, travel expenses for all instructional personnel, and expenditures for academic support.

Teaching faculty referred to those faculty members recorded as having teaching responsibility for off-campus courses; both University of Virginia and part-time Outreach faculty. Other instructional personnel referred to those providing direct instructional support or assistance including: clinical preceptors, teaching assistants, academic consultants (personnel providing specialized knowledge and assistance to faculty and students), guest lecturers, faculty providing thesis and/or project guidance, and others identified as being engaged in direct instructional activities. Travel expenses (mileage, food and lodging) related to the necessary transportation of instructional personnel to the instructional sites were calculated separately in order to illustrate one of the unique costs of the Outreach Program.

Instructional faculty from the University of Virginia providing their teaching services at no charge (NC) to the grant are noted as

Table 5

Outreach Graduate Nursing Program Fall 1977-Spring 1981
Student Credit Hours by Course and Semester

Semester	Course	Credit	Enrollment	Site	Instructor	Student Credit Hours
Fall, 1977	GNUR 730	2	53	Wytheville	Johnson	106
	GNUR 731	2	53	Wytheville	Johnson	106
Spring, 1978	GNUR 510	3	17	Roanoke	Ergle	51
	GNUR 510	3	18	Abingdon	Bohannan	54
Summer, 1978	GNUR 860	3	18	Abingdon	Shepard	54
	GNUR 860	3	9	Roanoke	Houston	27
Fall, 1978	GNUR 775	3	29	Abingdon	Blevins	87
	GNUR 775	3	19	Roanoke	McCoy	57
Spring, 1979	GNUR 776	3	29	Abingdon	Blevins	87
	GNUR 776	3	19	Roanoke	McCoy	57
Summer, 1979	GNUR 562	2	40	On-Campus	Wolf	80
	GNUR 572	4	40	On-Campus	B. Bancroft, Clore, Rowell	160
Fall, 1979	GNUR 741	2	25	Abingdon	Anderson	50
	GNUR 741	2	11	Roanoke	Anderson	22
Spring, 1980	GNUR 740	3	13	Roanoke	Gray	39
	GNUR 740	3	19	Abingdon	Gray	57
	GNUR 750	3	12	Abingdon	Johnson	36
	GNUR 701	3	6	Roanoke	Crosby	18
	GNUR 703	3	7	Abingdon	J. Bancroft	21
Summer, 1980	GNUR 861	3	8	Roanoke	Houston	24
	GNUR 861	3	18	Abingdon	Knight	54
	GNUR 896	2	7	Roanoke	Johnson	14
	GNUR 896	2	19	Abingdon	Johnson	38
	GNUR 898	2	1	Roanoke	Johnson	2
Fall, 1980	GNUR 701	3	9	Abingdon	Crosby	27
	GNUR 703	3	2	Roanoke	J. Bancroft	6
	GNUR 742	3	2	Roanoke	Fay	6
	GNUR 743	3	1	Roanoke	Johnson	3
	GNUR 751	3	12	Abingdon	Johnson	36
	GNUR 896	2	24	Rnk/Abdn	Johnson	48
	GNUR 898	2	2	Rnk/Abdn	Johnson	4
Spring, 1981	GNUR 702	3	9	Abingdon	Crosby	27
	GNUR 702	3	7	Salem	J. Bancroft	21
	GNUR 742	3	1	Roanoke	Ropka	3
	GNUR 743	3	1	Abingdon	Ropka	3
	GNUR 752	3	11	Abingdon	Johnson	33
	GNUR 896	2	4	On-Campus	Gleit	8
	GNUR 896	2	3	On-Campus	Gray	6
	GNUR 896	2	6	On-Campus	Johnson	12
	GNUR 896	2	1	On-Campus	Parsons	2
	GNUR 896	2	1	On-Campus	Taylor	2
	GNUR 898	2	1	On-Campus	Chioni	2
	GNUR 898	2	3	On Campus	Fay	6

such in Table 6. Salaries for these NC faculty members were based on the faculty member's actual salary during the semester of the course offering multiplied by the time effort (%) allocated to the grant. In order to compute a realistic cost for the direct instruction, these in-kind (NC) costs have been included. Where in-kind salaries were calculated, as in the Fall 1979 semester, the in-kind portion of the total instructional salary was indicated as a point of reference.

As discussed earlier, in order to include an accurate assessment of the Program Director's direct instructional salary, a proportion of her salary, specifically that proportion relating to instruction was assigned to the category of Instruction, while the rest was assigned to Academic Support. To designate this amount, an appropriate weighting guideline (Figure 5) was used.

The guidelines for the determination of the direct instructional cost per student credit hour are outlined in Figure 6. These guidelines were used on a semester basis whereby the total expenditures for instructional salaries, travel costs and academic support were added together and then divided by the respective student credit hours. The totals for instructional salaries, travel costs, and academic support for each semester were then added together to produce a total direct instructional cost and were then divided by the total number of credit hours to produce an average direct instructional cost per student credit hour for the program.

Using the guidelines outlined in Figure 7, an approximate direct instructional cost of offering the off-campus program to one student was calculated. In the process of deriving average program costs, the average costs for courses in program major, minor and supporting area

Table 6

Total Direct Instructional Unit Costs

SEMESTER/ COURSE	STUDENT CREDIT HOURS	INSTRUCT'L SALARIES	TRAVEL COSTS	ACADEMIC SUPPORT	SALARIES & TRAVEL COSTS ACADEMIC SUPPORT	COST PER STUDENT CREDIT HOUR
Fall, 1977						
GNUR 730	106	$ 5,973.53	$ 1,370.29	$ 4,632.10	$ 11,975.92	$ 56.50
GNUR 731	106					
Spring, 1978						
GNUR 510R	51	8,287.94	1,469.79	11,443.66	21,201.39	201.92
GNUR 510A	54					
Summer, 1978						
GNUR 860	81	3,000.00	-	9,684.14	12,684.14	156.59
Fall, 1978						
GNUR 775	114	4,500.00	620.67	15,398.05	20,518.72	142.49
Spring, 1979						
GNUR 776	144	4,884.44	75.46	13,627.10	18,587.00	129.08
Summer, 1979						
GNUR 562	80	10,249.78	-	12,753.64	23,003.42	95.85
GNUR 572	160					
Fall, 1979						
GNUR 741	72	6,883.69 (3,250.00=NC*)	550.05	16,746.25	24,179.99	335.83
Spring, 1980						
GNUR 740	96	8,994.71	4,332.98	8,395.13	21,722.82	127.03
GNUR 750	36	(8,185.00=NC)				
GNUR 701	18					
GNUR 703	21					
Summer, 1980						
GNUR 861	78	4,987.50	663.01	4,630.51	10,281.02	77.89
GNUR 896	52					
GNUR 898	2					

Table 6 (Continued)

SEMESTER/ COURSE	STUDENT CREDIT HOURS	INSTRUCT'L SALARIES	TRAVEL COSTS	ACADEMIC SUPPORT	SALARIES & TRAVEL COSTS ACADEMIC SUPPORT	COST PER STUDENT CREDIT HOUR
Fall, 1980						
GNUR 701	27	12,068.33	5,503.66	10,035.52	27,607.51	217.38
GNUR 703	6	(8,173.33=NC)				
GNUR 742	3					
GNUR 732	3					
GNUR 751	36					
GNUR 896	48					
GNUR 898	4					
Spring, 1981						
GNUR 702	27	11,051.39	4,276.38	5,955.30	21,283.07	170.26
GNUR 702	21	(8,993.33=NC)				
GNUR 742	3					
GNUR 743	3					
GNUR 752	33					
GNUR 896	8					
GNUR 896	6					
GNUR 896	12					
GNUR 896	2					
GNUR 896	2					
GNUR 898	2					
GNUR 898	6					
TOTAL	1,553	80,881.31	18,862.29	113,301.40	213,045.00	137.18**

* NC= No Charge Faculty (Salary = Gross Salary × Time Effort)
** Average Direct Instructional Cost per Student Credit Hour

A. Semesters Involved in Direct Instruction

Direct Instruction (1 class)	25%
Advising (Student)	15
Academic Administration	10
Total Time Effort to Grant Project	50%

B. All Other Semesters

Instructional Planning and Advising	20%
Unscheduled (Informal) Teaching Responsibilities	5
Advising (Students)	15
Academic Administration	10
Total Time Effort to Grant Project	50%

Figure 5. Example of Weighting Formula for Faculty Salary Calculation: Project Director

Factors Included to Determine the Direct Cost of Instruction:

Instructional Salaries

- o Salaries for Teaching Faculty (STF)
  - · Regular, Full-time Nursing Facuty
  - · Special, Outreach Faculty
- o Salaries for Other Instructional Personnel (SIP)
  - · Clinical Preceptors
  - · Teaching Assistants
  - · Academic Consultants
  - · Guest Lecturers
  - · Thesis Advisors

Academic Support

- o Salaries for Secretarial Support (SS)
- o Salaries for Student Wages (other than Instructional)(SW)
- o Contractual Services (CS)
- o Equipment and Supplies (E&S)

Travel

- o Travel Expenses to Off-Grounds Sites (T)
  - · Mileage Charges
  - · Meals
  - · Lodging

Direct Instructional Guidelines Per Student Credit Hour (SCH)

STF + SIP + SS + SW + CS + E & S + T ÷ SCH = Total Direct Instructional Cost Per Student Credit Hour

or

Instructional Salaries + Academic Support + Travel Costs ÷ SCH = Total Direct Instructional Cost Per Student Credit Hour

Figure 6. Guidelines for the Determination of Direct Instructional Cost Per Student Credit Hour

Factors Included to Determine the Direct Cost of Instruction:

- Typical Program Sequence - Courses, Credit Hours, Semester Taught
- Cost Per Student Credit Hour by Semester

Guidelines to Determining Average Direct Instructional Program Cost Per Student

- For Each Course in the Typical Program Sequence - COST PER SCH BY SEMESTER × CREDITS AWARDED FOR EACH COURSE;
- Calculate Total Course Cost for Each Area - MAJOR, SUPPORTING, MINOR;
- TOTAL COST FOR MAJOR + TOTAL COST FOR SUPPORTING AREA + TOTAL COST FOR MINOR = AVERAGE DIRECT INSTRUCTIONAL COST OF OFFERING THE OUTREACH PROGRAM TO ONE STUDENT

Figure 7. Guidelines for the Determination of Average Direct Instructional Program Cost for One Student

were computed. This program cost was derived using the program requirements (i.e. courses and number of credit hours), and then multiplying these credit hours by the average direct instructional costs per student credit hour taken from those semesters in which the course was taught. As described earlier, the Outreach Program has four curricular components: major courses, supporting courses, minor courses, and elective courses. The program sequence requires 42 credit hours for students choosing an Administration or Education Minor and 39 credit hours for students participating in the Clinical Specialization Minor. Of these 39-42 credit hours, 2-3 elective hours were accepted as transfer credit since elective courses were not offered in the Outreach Program. The average direct instructional program cost of offering the program to one student was based upon 36 credit hours (using the Education Minor), and excluded the cost of the elective course. As suggested earlier, this cost should only be used as a rough approximation of program expense as there are other costs which were not included in this computation.

Findings and Discussion

Using the guidelines outlined in Figure 6, a direct instructional cost of $213,045.00 for the program is calculated as shown in Table 6. Using costs per student credit hour for each semester, an average direct instructional cost per student credit of $137.18 was calculated.

Following the initial determination of direct instructional costs, and using the guidelines in Figure 7, the findings are presented in Figure 8 for the average direct instructional cost of offering the program to one student. The average cost was calculated as $5,537 and consisted of: $1,662 for the major component, $2,331 for the supporting area and $1,544 for the minor area (education).

I. Major (13 credit hours)

GNUR 572 - Primary Skills in Adult Health Seminar (4)
GNUR 730 - Medical-Surgical Nursing Seminary (2)
GNUR 731 - Medical-Surgical Nursing Practicum (2)
GNUR 740 - Medical-Surgical Nursing Seminar II (3)
GNUR 741 - Medical-Surgical Nursing Practicum II (2)

Total Direct Instructional Cost for Major ..... $ 1,662

II. Supporting Courses (18 credit hours)

GNUR 562 - Basic Supporting Sciences (2)
GNUR 775 - Human Physiology I (3)
GNUR 776 - Human Physiology Ii (3)
GNUR 860 - Introduction to Research (3)
(or EDRE 523 accepted for transfer credit)
GNUR 861 - Research Design (3)
GNUR 896 - Project Guidance (4)
(or)
GNUR 898 - Thesis Guidance (4)

Total Direct Instructional Cost for Supporting Courses .... $ 2,331

III. Minor (6-9 credit hours)

Administration (9)
Education (9)
Clinical Specialization (6)

Total Direct Instructional Cost for Minor ..... $ 1,544*

IV. Elective Courses (2-3 credit hours)

Not taught in Outreach Program, transfer credits accepted

AVERAGE DIRECT INSTRUCTIONAL COST OF
OFFERING THE OUTREACH PROGRAM TO
ONE STUDENT $5,537**

* This figure has been calculated using the Education Minor.

** This figure reflects the definition of "Direct Instructional Costs" as defined in this report.

Figure 8. Program Cost From Outreach Program Sequence

(39-42 credit hours)

Referring back to the direct instructional costs, it was interesting to note that expenditures under the category of Academic Support comprised 53% of the total direct instructional costs. This figure reflects the cost of 'starting-up' a new program, buying equipment and supplies, as well as some of the unique costs of an off-campus program. These unique costs include expenditures for long-distance telephone calls, a necessity for effective communication between the on-campus faculty and off-campus students, expenditures for duplicated material not locally available to students, and other expenses such as postage which were beyond the normal expenditure level of an on-campus program.

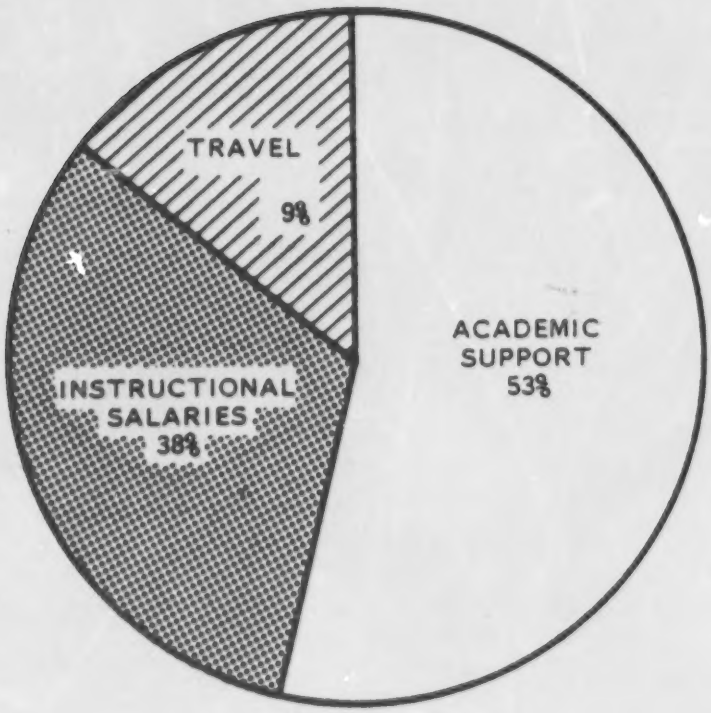
The travel expenses for the Outreach Program constituted approximately 9% of the total direct instructional unit costs. This figure did not reflect the time that the instructional faculty spent on the road (a round trip = 5-10 hours). Travel expenses may be misleading when expressed in monetary terms. The opportunity costs must be considered in a program that demands up to two workdays of traveling time per week from participating faculty members. Certainly, the cost was much greater than the salary assigned to the course and the travel expenses. Ideally, the monetary figure should be adjusted to reflect the cost of time for travelling--time, which would otherwise be spent more productively by the faculty members on other responsibilities.

The cost figures also reflected the fluctuating enrollment, which was especially apparent in the first two semester (Fall 1977, Spring 1978) of the program. The number of students enrolled in clinical

courses determined the number of clinical preceptors assigned to the students, which in turn determined an amount under the category of instructional support salaries. Unlike instructional faculty salaries, where course enrollment was not related to the salaries paid out, the clinical preceptor salaries varied according to the number of students assigned to a preceptor and the time spent with each student. Preceptors were reimbursed at a fee of $10 per hour per student.

For means of comparison, cost data for the on-campus master's degree nursing program for the 1978-79 academic year were provided by the University of Virginia Office of Resource and Policy Studies. Per student credit hour cost was larger for the on-campus graduate nursing program and was computed at $212.98. Approximately two-thirds of that figure ($141.00) was attributable to faculty salaries. The remaining amount, 33% ($71.00); was made up of additional direct costs (equipment, secretarial support, teaching materials) incurred as a portion of the instructional effort.

The figure of $137 average direct instructional cost per student credit hour for the Outreach Program was made up of a 38% cost of instructional salaries ($52.00), 9% travel costs ($12.00), and 53% cost of academic support ($73.00). A graphic representation of these figures is shown in Figure 9. One explanation for the difference in faculty costs is that f[illegible] the on-campus program, total expenses for maintenance of faculty (salary, benefits, etc.) were charged as instructional costs regardless of the actual contribution to classroom teaching an individual made. In other words, 100% of the salary of on-campus faculty was charged to instruction even though the faculty member may teach only one course and/or have administrative duties. In contrast, costs



Academic Support	53 %
Instructional Salaries	38 %
Travel	9 %
Total Direct Instructional Cost	100 %

Figure 9. Factors of Direct Instructional Cost

computed for the Outreach Program included only the portion of time individuals devoted directly to the instructional effort. Faculty costs may also differ due to the hiring of part-time faculty to teach specific courses in the Outreach Program. During those semesters when the Outreach Program was able to hire qualified instructional faculty from the southwestern Virginia area to teach courses (Spring 1978, Summer 1978, Fall 1978, Spring 1979, two course sections for Summer 1980) both salary and travel costs were minimized.

When Outreach students were required to come on-campus for the Summer 1979 session, with no instructional travel costs and increased enrollment, instructional costs were again minimized. In addition, the grants have absorbed many of the indirect instructional costs of the off-campus program.

The in-kind (NC) services (faculty, support services and classroom space) provided to the Outreach Program greatly affected the costs of the program. The existence of these in-kind services reflected the commitment of the University and the cooperation of the southwestern Virginia community but were not always guaranteed in an Outreach Program of this type. Without these in-kind services, a small Outreach Program, like a small institution, was forced to operate under a fixed overhead and was not able to take advantage of economies of scale. In addition, the nature of the Outreach Program introduced additional costs of travel and opportunity costs of travel. The clinical component of nursing education was essential, requiring additional clinical instructors and lower faculty-student ratios.

Within the discussion of costing methodology, a note was made of various faculty members whose time was devoted to the program, but

who received no payments from the grant budget. These faculty members represented a salary expenditure that would realistically have to be supported by a program not in receipt of grant aid. Other adjunct faculty members might be willing to donate personal services as preceptors regardless of the source of the funding. Other expenditures that were a normal part of either direct or indirect costs (i.e. rent or amortization payments for classroom space) were not reflected in the costing formula.

The existence of services, facilities or materials which were donated "in-kind", i.e. where no financial transaction took place, points to the relative nature of costs and benefits. Resources like faculty time must normally be purchased through a program budget. When those same resources were donated to the program they were no longer considered as costs, rather they became benefits to the program. However, they were reflected as costs in the budget of some program in the institution.

This changing designation of a resource as either a cost (if paid for) or a benefit (if donated) raised two important considerations to be made during an analysis of the unit cost data now available. The first consideration was that all the figures that have been computed were conservative. As mentioned earlier, it would be unrealistic to compare the Outreach Program costs with operational costs of other on-campus programs or of any future program which might have to purchase all necessary resources. The second consideration was that the language of "resources" and "expenditures" suggested an accountant's view of the educational process. Such a view was often simplistic and may tend to ignore the complexity of the personal relationships within a program's

operation. Such a view also overlooked both benefits and costs which cannot be measured in financial terms. It is precisely because of the involvement of nurses and the educational community in the Outreach locations that the program avoided some usual costs and enjoyed benefits that flow from cooperative support. The pay-off to the program and its graduates may be much greater, even though impossible to calculate financially, than if such services involved out of pocket expenses.

Summary

The determination of the financial costs of offering the Outreach Program was the focus of this section. The cost study was approached through a review of the relevant literature on the nature of costs in higher education and through a discussion of the costing terminology specific to the costing approach used in this project. Using guidelines discussed in this section the methodology for the determination of average direct instructional costs per selected outputs were developed. The final part of this section included the actual computations for direct instructional unit costs as well as a discussion of the findings. The cost findings computed in this section were as follows:

Direct Instructional Cost per Student Credit Hour	$ 137.18*
Direct Instructional Cost of Offering the Outreach Program to One Student (Education minor)	$ 5,537.00*
Direct Instructional Cost for Major	$ 1,662.00*
Direct Instructional Cost for Supporting Courses	$ 2,331.00*
Direct Instructional Cost for Minor	$ 1,544.00*

* All figures reflect an average cost.

SECTION VI

BENEFITS

For the purposes of this report, a "benefit" of an educational program is defined as a positive result or outcome that can be anticipated from experience or participation in the program. Benefits may be either direct or indirect, immediate or long-term. Short-term, direct, measureable benefits can also be called program outputs. Long-term, indirect, less-easily measured benefits can be called impacts. Though both impacts and outputs can be anticipated, more attention was given to outputs in the early evaluation efforts, as they are more accessible to examination and analysis. Later efforts will focus upon means of collecting data on the more speculative, potentially developing benefits which we have designated as impacts.

The benefits of education affect various groups. Discussion of the recipients of benefits will necessarily be limited by the same qualifications we apply to the benefits themselves. In other words, short-term, direct benefits (outputs) will accrue clearly to the populations most directly involved in the educational effort, i.e. students and faculty. Indirect benefits (impacts) will spread to educational institutions, communities, and society at large in addition to the primary participants.

Background: Selected Literature

The vast amount of literature describing the variety of potential benefits of education has no single focus. It discusses such expansive concepts as "transmission of culture" and "building foundation for democracy" and also treats very specific goals such as graduating more

accountants, engineers, or veterinarians. Beneficiaries of education are described in global terms as "future generations" or in specific terms as "the baccalaureate class of 1980." In order to develop a focus within this range of benefits and beneficiaries, we chose to divide the information found in the literature into four types of benefits. One area around which a major segment of authors coalesce are economic issues. Another group of authors, while not oblivious to the implications of education to the economy of individuals or society, focus their thoughts on the benefits of education which are non-economic. Writers choosing either an economic or non-economic focus usually separate their treatment of benefits into those which affect individuals and those which have a broader impact on communities or society at large. The four treatments of benefits are then: personal and social economic benefits and personal and social benefits that are not economic.

Economic Benefits: Personal

From the end of World War II until the late 1960's a single assumption dominated the argument for the individual economic benefit of higher education. That assumption was that for every year of additional education, students could anticipate an increase in earning power. Several major studies (Soloman, 1973) presented an empirical base for this assumption by relating both quantity and quality of economic achievement to higher income levels in later life.

The traditional belief in the dollar and cents value of education has abated only moderately in recent years. People still believe more school now means higher income later. The results of a national survey published as recently as 1974 indicated that more than 95% of the parents of school age children believe that they should go on for post-

secondary schooling, and of that group more than 80% believed that the major benefit of such schooling would be training for a good (read: well-paying) job (Minor & Murray, 1974).

Other literature has revealed challenges to the conventional wisdom linking education and earnings. Richard Freeman (1976) has argued that the economic benefit once insured to college graduates by a growing labor market in demand of their skills (or credentials) has declined.

In contrast to Freeman, other authors continue to argue that the economic value of education remains a major benefit to be considered (Bowen, 1977; Soloman, 1973; Taubman, 1974, 1979). Bowen's analysis, as late as 1977, concluded that "the monetary returns from higher education alone are probably sufficient to offset all costs" (Bowen, p 2).

Economic Benefits: Social

The most persuasive argument for social expenditures in support of education is expressed by the "human capital" thesis. This argument relies on the language of economics and establishes its position by way of the metaphor of investment. The first detailed treatment of the human capital argument was published by Gary Becker in 1964. The notion became a major rationale for supporting U.S. investment in education in underdeveloped nations as well as for continued buttressing of the U.S. educational system.

Simply stated, the argument relies upon an analogy between physical capital (factories, machinery, etc.) as a productive force within society and human beings as another source of productivity. Within this analogy, a given financial investment in physical capital is seen as producing a measureable rate of return. The value of such investments

(or their benefits) can be calculated by subtracting the costs of purchasing and maintaining, for example, a new machine, and the eventual profits (in materials produced, efficiency, etc.) it will yield.

We can invest in the future productivity of the members of society by educating them, say the proponents of the human capital theory. How valuable such investments are depends on the cost of education which include support of an educational system as well as loss of school age people from the work force as measured against their eventual productivity as wage earners. While it is true that human capital theorists often mention non-economic returns on educational investments, the root of the metaphor is economic and relies on an investment strategy and a social profit motive.

Non-Economic Benefits: Personal

Similar though not as extensive problems of measurement apply to the benefits individuals gain from education. Advances in psychometrics now allow for changes in knowledge and attitudes to be assessed and for the skills resulting from some types of education to be measured. Perhaps the most extensive taxonomy of these benefits has been developed by Oscar Lenning and his associates working at the National Center for Higher Education Management Systems. Lenning's work (1974, 1977, 1978) encompasses not only a theoretical and conceptual discussion of benefits, but also a bibliographic compilation of most previous literature in the area. To this listing he has added his own taxonomy of benefits. These lists include factors which are academic and intellectual, social and interpersonal, psychological and emotional, vocational, aesthetic, philosophical, moral, and religious. The list below samples a few of the individual benefits which are seen as resulting from education.

1. Expansion of personal knowledge
2. Ability to think critically
3. Increase in self-esteem, self-confidence
4. Acquisition of identity with vocational credentials
5. Ability to enjoy aesthetic events more fully
6. Increase in personal autonomy
7. Development and clarification of personal values
8. Higher social status
9. Satisfaction from better job skills
10. Ability to improve through self-critique

This list represents a small group of benefits derived from the taxonomy proposed by Oscar Lenning.

Non-Economic Benefits: Social

Economic benefits are among the more easily quantifiable results of education. For this reason, while not forgetting the motivational value of financial arguments to both individual and governments, the amount of research focusing on financial reward has been significant. Some authors, however, have reacted against the reductionism that economic analyses imply. They argue that the value of education is impossible to quantify and that more attention should be given to the benefits we cannot measure by dollars and cents. Characteristic of such authors is Louis Benezet (1971).

Benezet's appeal to the general, non-economic social benefits which flow from education is echoed by other writers (Bowen, 1977; McGrath, 1980; Witmer, 1978). These writers often point to results such as reducing crime or improving health which also appear in the lists of

economic benefits. They list these results as ends in themselves that will provide a better general "quality of life," rather than as a means toward financial reward.

Graduate Nursing Education

Nursing education is part of higher education. As such it shares many of the potential benefits which are expected as outcomes of all higher education. There are, however, significant differences in the benefits which can be anticipated from diploma, associate, or baccalaureate level nursing programs and programs at the graduate level. All three of those paths (diploma, ADN, BSN) end with the professional credential qualifying the recipient for the duties, responsibilities, and rewards of nursing practice. Graduate level nursing education has additional and even more focused objectives to meet and more benefits to be expected.

An historical review of the nursing literature reveals that graduate level programs were initially developed to prepare either educators to teach in college level nursing programs or administrators for nursing care settings. In the last few years, however, the major benefit expected by students in graduate programs was the acquisition of skills in clinical specialties. While the option of becoming an educator is still important, many feel that study of specialized areas from both the academic and clinical perspectives will increase the knowledge base available to the nurse whose service in a clinical setting will then be improved. This observation supports the contention that while the master's degree in nursing is primarily of functional benefit to most graduates who will practice in clinical settings it has the additional value of preparing some for an academic role as teacher or researcher.

The professional focus of the graduate degree parallels the function of most such degrees even in traditionally "liberal arts" areas, as has been indicated by analysts of higher education for some years (Berelson, 1960).

Benefits to be expected from graduate nursing programs include specific role preparation in four areas:

1. As a clinical specialist;
2. As an educator (teacher or researcher);
3. As a manager or administrator;
4. As an agent of change within complex organizations (McLane, 1978).

The benefits of such role development would presumably flow to graduates as well as to their employees and those they would serve in the various situations of employment.

Some studies have shown that some students enter a master's program as a preliminary for doctoral study or simply because the program offers them another opportunity for continuing education (Parsons, 1979). Graduates themselves have pointed to such benefits as: developing an enhanced professional identification; increasing ability in problem solving; having timely access to the moral support of faculty and other students for career decisions; and obtaining a more balanced perspective toward the variety of skills which are necessary to nursing (Crandall, 1976). Other writers have suggested that both individual graduates and the nursing profession in general will benefit from the prestige of nursing vis-a-vis other health fields as increasing numbers of nurses hold graduate degrees. The benefits in this case relate not

only to the prestige attached to the higher degree, but also to the shared base of general education which will allow the development of further relationships with health care providers in other disciplines (Galambos, 1979).

The national organizations which represent nurses have issued several policy statements about the particular aims of master's level nursing programs. Both the National League for Nursing (NLN) and the American Nurses Association (ANA) stress "preparation of leaders in nursing" as the essential motive of graduate programs (Lodge, 1977).

The NLN identifies nine specific student benefit opportunities which can be gained from master's level study. They are:

1. To acquire advanced knowledge to support advanced nursing practice;
2. To expand student knowledge of nursing theory as a basis for advanced practice;
3. To develop expertise in a specialized clinical area;
4. To acquire knowledge and skills for a specific functional role in nursing;
5. To acquire initial competence to conduct research;
6. To plan and initiate change in the practice and delivery of care within the health care system;
7. To develop and implement leadership strategies to improve health care;
8. To engage in collaborative relationships to improve health care;
9. To acquire a foundation for doctoral study (NLN, 1979).

These aims or objectives are potentially beneficial not only to students but also to the institutions and communities where they will work.

Beneficiaries of Graduate Nursing Education

During the planning stage of the program evaluation, the decision was made to focus on the four groups most directly involved in program implementation and most affected by program results. These groups were students, faculty, the nursing school and the Outreach Program area communities. Each of these groups is listed below into a list of benefits they might reasonably expect to derive from the Outreach Program.

Students. The direct beneficiaries of education are students. Because this program has specific vocational aims, the list below is arranged according to the obvious outcomes students can expect to result from their participation. Students completing the program will receive two immediate outputs. First, the accumulated knowledge and skills which are the objectives of instruction. Second, the degree which symbolizes those factors and becomes the credential representing the holder's abilities to the profession and the public. The benefits which can be inferred from these two outputs are listed below:

1. Economic
    a. Access to higher paying positions;
    b. Possible promotion in current position;
    c. Long-term financial security through job mobility;
    d. Better credit as a result of perceived professional status;
    e. Improved likelihood of long-term career advancement.

2. Vocational

   a. Certification to teach, become an administrator or assume expanded clinical responsibilities;

   b. More autonomy in current job;

   c. Heightened feeling of confidence in current job;

   d. More prestige with other professionals and with work peers;

   e. Impetus to work for an expanded role to use new knowledge and skills in current job;

   f. Opportunity to develop professional relationships with program faculty;

   g. Satisfaction from contribution to the quality of health care in the area;

   h. Likelihood of becoming a leader in a local health care system and in a professional organization;

   i. Development of skills to do research and enhance position in existing teaching job;

   j. Certification to undertake doctoral studies;

   k. Efficiency in performing general nursing duties.

3. Personal

   a. Satisfaction of achievement in completing advanced studies;

   b. Supportive relationships developed with peers in program;

   c. Increased prestige with family and community;

   d. Better understanding of role and [illegible] potential as a nurse;

   e. More favorable self-concept.

The economic, vocational and personal benefits listed above are all anticipated results which should follow the acquisition of new knowledge and skill and the awarding of a graduate nursing degree.

Faculty. Benefits for the program faculty pertain generally to the teaching, research, and service functions which all University faculty share. Additional benefits such as those having an impact on career development are:

a. Opportunity to work with graduate-level students;

b. Opportunity to develop additional research materials and publications (professional development);

c. Improvement of personal understanding of graduate-level nursing;

d. Consequent improvement in on-campus teaching techniques;

e. Exposure to heterogeneous student body with backgrounds and needs differing from the usual on-campus student population;

f. Exposure to more "practically oriented" nurses with work experience "in the field";

g. Opportunity to act as agents of change in extending new ideas and knoweldge at the local level;

h. Expanded contact with planners and deliverers of health care (i.e., extending professional contacts);

i. Opportunity for more involvement in planning, managing, and evaluating an educational program;

j. Exposure to the unique needs of a rural patient population.

This group of potential benefits to faculty members covers a wide range of possible results. They could be expected to accrue to individual faculty members in different measure, depending on the level of involvement and type of task to which each faculty member was assigned.

Nursing school and university. Potential benefits that could accrue to the Nursing School and the University of Virginia are listed below:

a. Ability to draw more faculty desiring contact with graduate students;

b. Opportunity to demonstrate service to previously underserved region;

c. Additonal income through grant support;

d. Potential for future revenues in tuition and fees;

e. Improvement in on-campus instructional program through feed-back from remote-site teachers;

f. Development of more sophisticated information on graduate nursing in general;

g. Opportunity to develop cooperative arrangements with other schools, hospitals, etc. in the program region;

h. Establishment of a regional training center which could be used in the future as a unique care setting for on-campus students.

This group of benefits speaks to administrative expectations of those who plan off-campus programs.

Community. Community, in this section, includes both the general population surrounding the southwestern Virginia program, as well as

the more specific community of nurses and other members of the local health care system. A few of the benefits community members could anticipate are listed below.

a. Existence of a local graduate program allows the already functioning nursing population to remain in residence while expanding skills;

b. Leaders are developed for the local health-care system;

c. Teachers are produced (and certified) to assist in baccalaureate, associate degree and diploma programs.

Methodology

The data collection efforts concerning actual program benefits concentrated upon four groups of people. Each group participated either in the planning and long-term oversight of the Outreach Program or was involved in the daily detail of teaching or studying. The four groups were those listed above: program students (both those completing degrees and those who had left the program after enrollment), program faculty (on and off-campus), Nursing School administrators, and Advisory Committee members living in Southwest V inia.

Benefit surveys were developed using the lists of potential benefits that had been derived from the educational literature (see above). Each survey was targeted to a specific respondent group (students, faculty, nursing school administrators, Advisory Committee). An interview protocol was also developed for use after the completion of benefit surveys.

Thirty-seven students were surveyed and interviewed during the evaluation project. Thirty-one of those students are scheduled for

successful completion of the program; six were enrolled at the program outset and left for a variety of reasons. Seventeen faculty members were surveyed and interviewed. Eleven of them were resident faculty at the University of Virginia, six taught in the program on a part-time basis. The remaining faculty were employed at other institutions located in the program area. Advisory Committee members who remained in touch with the program from the planning phase through student graduation were contacted. They numbered thirteen. Finally, three members of the School of Nursing administration provided data on the Outreach Program.

In summary, 100% of the active students and the same percentage of those faculty who were included in off-campus instruction were contacted as part of the evaluation. In addition, the Nursing School administrators responsible for the Outreach Program were contacted, as were a sampling of Advisory Committee members and students no longer active in the program.

In the Fall of 1980, benefit surveys were mailed to each of the four Outreach participant groups. As the surveys were returned to Charlottesville, an interview schedule was developed which allowed evaluation staff members to travel to Southwest Virginia in the Spring of 1981 for personal interviews with each survey respondent. Each individual was encouraged to expand on the list of benefits received from the Outreach experience, to explain both the financial and personal costs of the program, to enumerate any specific problems occurring within the program, and to offer recommendations for program improvement. The interviews and all survey data remained confidential to the evaluation team. All data which resulted from surveys and interviews were reported in aggregate form only.

Interviews also included a discussion of the benefits not listed on the survey, unique problems and costs of the program, and recommendations for program improvement. The lists of "other benefits," included here are the result of an analysis of interview responses. Items which appear may be considered representative of the general consensus of respondent opinion.

As noted above, advisory committee members were surveyed and then interviewed to ascertain their perceptions as representatives of the communities in which Outreach Program graduates work. Their involvement in the program ranged from the casual interest of a potential employer of graduates to the more thoroughly involved teachers who volunteered their services as preceptors during the teacher training and clinical practicum components of the curriculum. While the participation and cooperation of advisory committee members were crucial to the success of the program, their role demanded less time and contact than did that for students or faculty. Their comments are short in relation to the other groups. Additional comments may be expected from them later, when long-term impacts of the program are assessed.

Three people from the School of Nursing were involved in administrative positions related to the Outreach Program. Their perceptions of the benefits, costs, and negative outcomes of the program were generally uniform, and repeat many opinions of the faculty in general.

Findings and Discussion

The data collected during the survey/interview phase of the evaluation project were included below. A list of benefits from the survey of each respondent group was provided. Items from the surveys were reported in priority order, i.e., those items selected as most important

by each group were listed first. Survey instruments and the interview protocol were included in the appendices.

Students

Benefits. The table that follows (Table 7) displays details of survey responses from thirty-two active students. A graphic description of the survey responses is shown in Figure 10. The highest priority benefit for this group was: potential for long-term career advancement. Other benefits were listed in order of the number of respondents who answered them positively.

Interview Responses. During interviews, benefits which students mentioned in addition to those on the survey fell into several categories. Broadly conceived, these categories could be described as general, specifically job related, professional and personal.

General benefits included the following: the program provided an opportunity to learn from other students with varied backgrounds and work experiences; relationships with other highly motivated students provided a built in program "support group" which will continue after program completion; generally better working relationships with other health professionals resulted from involvement with Outreach.

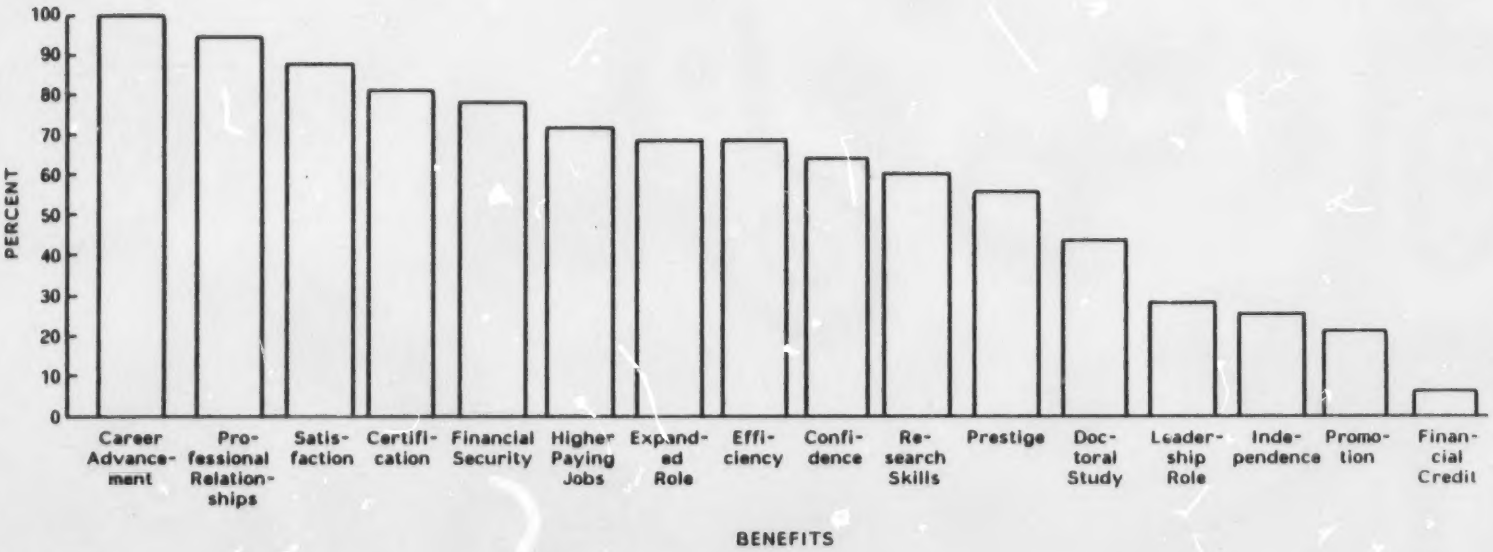
Job related benefits included the following: theories and techniques learned in school could be applied to an ongoing practical job situation; the unique structure of the program allowed students to work full-time and simultaneously pursue a graduate degree – without a locally offered program this would never have been possible.

Professional benefits included the following: students were equipped to be agents of change within the local nursing community; the general perspective on the profession was broadened by more exposure

Table 7

Student Benefits

Benefits	Rank Priority	Number of Positive Responses	Percentage of all respondents checking this item
It is likely that my chances for career advancement over the long-term will improve.	1	32	100%
I will benefit from the professional relationships I have developed with Outreach program faculty.	2	30	94%
My education will give me a feeling of satisfaction as I improve the quality of nursing care in this area.	3	28	88%
I will be certified to teach, become an administrator or assume more clinical responsibility.	4	26	81%
I will be qualified for more different jobs, and will feel more secure financially.	5	25	78%
I will be qualified for higher paying jobs.	6	22	69%
I will be motivated to work for an expanded role to use my new skill and knowledge in my current job.	7	22	69%
I will be generally more efficient in performing my general duties as a nurse.	8	22	59%
I will feel more confident about my current job.	9	20	63%
My new degree will add to my prestige at work and with other nurses.	10	18	56%
The research skills I have developed will enhance my value in my current teaching job.	11	18	56%
I will be qualified to go on for doctoral study.	12	14	44%
I will be more likely to become a leader in my local nursing organization.	13	9	28%
I will have more independence in my current job.	14	8	25%
I will expect a promotion in my current job.	15	6	19%
My financial credit will improve with a new professional stature.	16	2	6%



*N=32

Figure 10. Benefits Perceived by Students*

to nursing theory and literature; students learned to use area health and education resources more efficiently; students were prepared to be preceptors in nursing baccalaureate programs which might come to the area.

Personal benefits included the following: independence as a learner was enhanced; confidence for job seeking was heightened; general assertiveness increased; an expansion of personal perspectives was a stimulation to pursue other areas of interest professionally and academically.

Students not Completing Outreach. The preceding list of responses summarizes the perceptions of most of the students who participated in the Outreach Program. However, several other students who began the program but did not complete it listed unique benefits.

Additional training which would improve their professional credentials and feeling of satisfaction at improving the quality of nursing care in the region were the two benefits considered as most important to students who left the program. Other items not previously listed for the enrolled student group were: the program raised the awareness of students to previously unconsidered educational goals; while students left the Outreach Program for a variety of personal and professional reasons, many were motivated by the Outreach experience to enroll in other programs closer to home, and several finished their degrees full time on-campus in Charlottesville.

Faculty

Benefits. The table that follows (Table 8) displays details of survey responses from seventeen faculty members who participated in instruction during the Outreach Program. The survey responses were also graphically depicted in Figure 11. Highest priority benefits to them were the opportunity to be an agent of change and exposure to a heterogeneous student body.

Interview Responses. Benefits which faculty mentioned in addition to those on the survey fell into two types: benefits which could be described as personal and benefits relating to the service function faculty fulfill as members of the School of Nursing.

Two personal benefits were mentioned: many faculty members welcomed the opportunity to work with students who were unusually motivated and grateful to be involved in the Outreach Program; and some off-campus faculty felt that their participation in a University of Virginia program gave them an enhanced credibility at their parent institutions.

Three service related benefits were mentioned: a feeling of achievement from having contributed to a long-term goal of community service; satisfaction at filling an educational need in the program region and making an impact upon the quality of health care in the area; and pride at being able to improve the image of the School of Nursing.

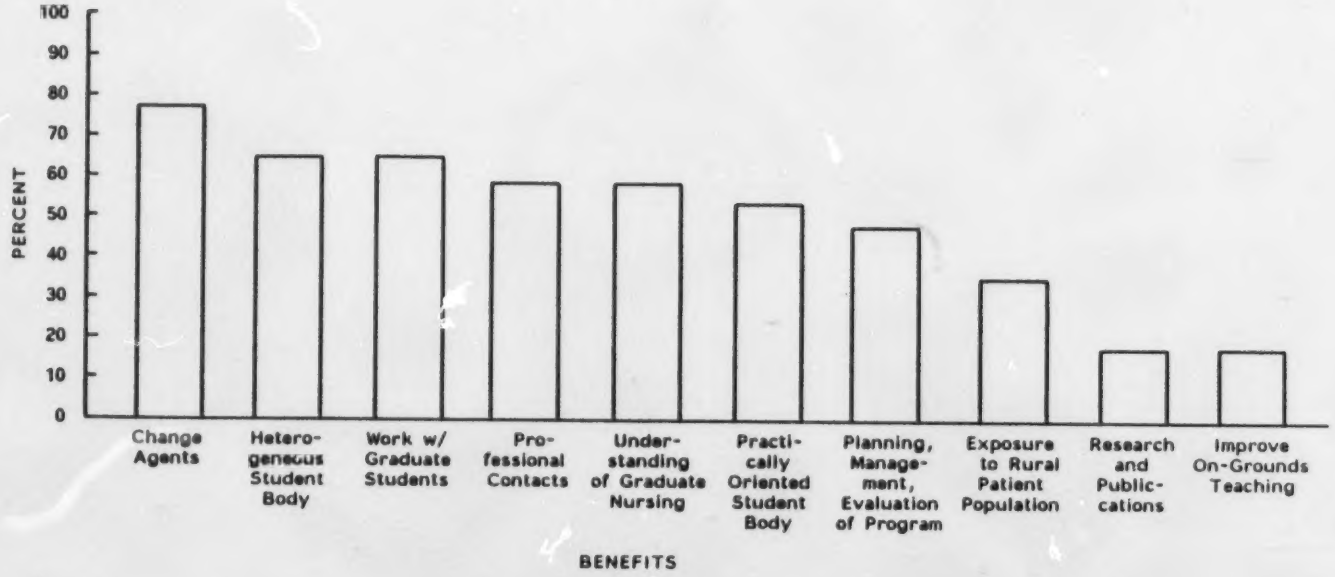
School of Nursing

Benefits. Three administrators from the School of Nursing were surveyed and interviewed to collect data on actual benefits to the

Table 8

Faculty Benefits

Benefits	Rank Priority	Number of Positive Responses	Percentage of all respondents checking this item
Opportunity to act as agents of change in extending new ideas and knowledge at the local level.	1	13	77%
Exposure to heterogeneous student body with backgrounds and needs differing from the usual on-campus student population.	2	11	65%
Opportunity to work with graduate-level students.	3	11	65%
Expanded contact with planners and deliverers of health care (i.e., extending professional contacts).	4	10	59%
Improvement of personal understanding of graduate-level nursing.	5	10	59%
Exposure to more "practically oriented" nurses with work experience "in the field."	6	9	53%
Opportunity for more involvement in planning, managing, and evaluating an educational program.	7	8	48%
Exposure to unique needs of a rural patient population.	8	6	35%
Opportunity to develop additional research materials and publications (professional development)	9	3	18%
Consequent improvement in on-grounds teaching techniques.	10	3	18%



*N=17

Figure 11. Benefits Perceived by Faculty*

School and the University resulting from the Outreach Program. The following table (Table 9) details their responses to the surveys. Highest priority items included the opportunity to develop cooperative arrangements with other schools and hospitals and the opportunity to demonstrate service to a previously underserved area.

Interview Responses. The five major benefits mentioned by the administration and not appearing on the benefit survey are listed below: the program provided an opportunity to try out new curricular ideas; the program enhanced the image of the University and the School of Nursing; the major objective of the Outreach Program, to produce masters level nurses for Southwest Virginia, was deemed a success; the general educational level of nurses in the state would be raised as a result of the Outreach Program; the regional consciousness of the need for baccalaureate level programs was raised in the program region.

Community

Benefits. Thirteen members of the Advisory Committee provided survey and interview data. Their responses to surveys were tabulated below in Table 10 and graphically depicted in Figure 12. They listed two benefits of highest priority to their community: the existence of a locally based graduate program and the production of teachers for ongoing nursing programs.

Interview Responses: Community. In addition to the benefits suggested by the survey form, members of the advisory committee mentioned the following three benefits: the cooperative arrangements between the University and schools or hospitals in the program region were a crucial component to the program's smooth operation. Advisory

Table 9

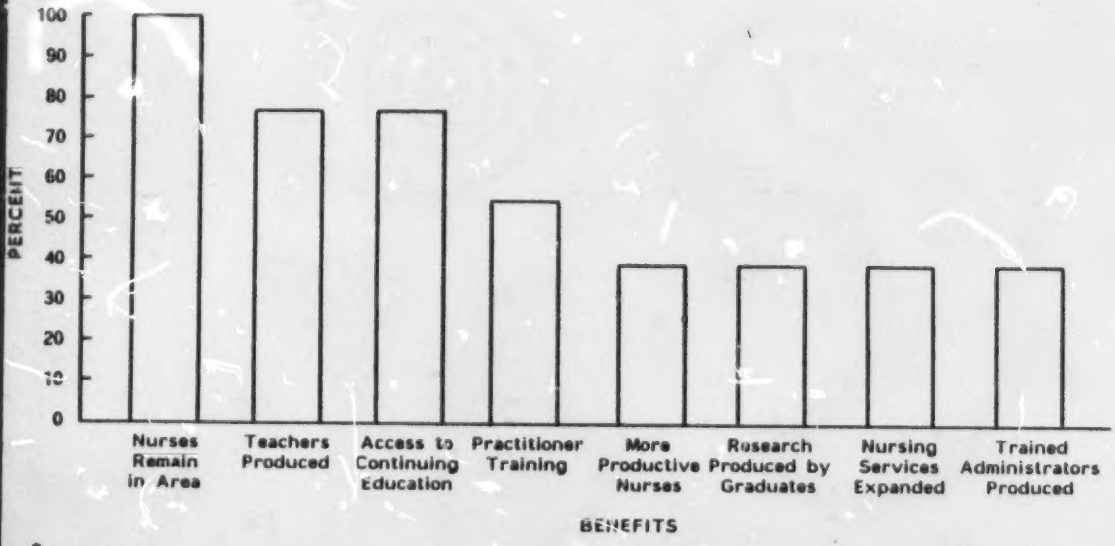
Nursing School Benefits

Benefits	Rank Priority	Number of Positive Responses	Percentage of all respondents checking this item
Opportunity to develop cooperative arrangements with other schools, hospitals, etc. in the program region.	1	3	100%
Opportunity to demonstrate service to previously underserved region.	2	3	100%
Additional income through grant support.	3	2	67%
Establishment of a regional training center which could be used in the future as a unique care setting for on-grounds students.	4	1	33%
Ability to draw more faculty desiring contact with graduate students.	5	Ø	
Potential for future revenues in tuition and fees.	6	Ø	
Improvement in on-grounds instructional program through feedback from remote-site teachers.	7	Ø	
Development of more sophisticated information on graduate nursing in general.	8	Ø	

Table 10

Community Benefits

Benefits	Rank Priority	Number of Positive Responses	Percentage of all respondents checking this item
Existence of a local graduate program allows the already functioning nursing population to remain in residence while expanding skills.	1	13	100%
Teachers are produced (and certified) to continue this program and assist in baccalaureate associate degree and diploma programs.	2	10	77%
Nurses "in the field" have access to program offering as a source of continuing education.	3	10	77%
General quality of nursing care is improved by practitioner training.	4	6	46%
A generally more productive force of working nurses.	5	4	31%
Particular concepts and techniques unique to the rural setting may be produced by the research efforts of the program graduates and faculty.	6	4	31%
Range of nursing services are expanded by diffusion of clinical specialty skills to local graduates and faculty.	7	4	31%
Trained administrators are developed for local nursing institutions.	8	3	23%



*N=13

Figure 12. Benefits Perceived by Community*

committee members agreed that even when the program is completed, those arrangements, both with the University and among local institutions, will remain beneficial to the educational and health care sectors; the master's level prepared nurses from the Outreach Program will be available to teach and encourage the increase in baccalaureate programs in the area; they will also improve qualifications of teachers in existing associate degree programs.

Summary

The preceding section described the literature of higher education as it relates to the concept of benefits. Lists of potential benefits for an off-campus graduate program in nursing were compiled from the educational literature and benefit surveys were constructed to assess the actual beneficial results of participation in the Outreach Program to each of four groups: students, faculty members, administrators representing the Nursing School and University, and Advisory Committee members representing the communities served by the program. Results of the surveys and the interviews which followed them were provided in narrative and tabular form.

SECTION VII

NEGATIVE OUTCOMES AND PROBLEMS

The previous section described the method of surveying and interviewing each group of participants from the Outreach Program. During the interview process attention was focused not only on the benefits which resulted from the program, but also upon the negative outcomes and problems that participants experienced. This section includes a description of those negative outcomes and problems as reported by students, faculty, advisory committee members and nursing school administrators.

Students

Negative Outcomes. Negative outcomes of the program reported by students fell into two categories: financial and personal.

In the area of finances, the distance some students had to come for classes (as much as 300 miles, one-way) called for major expenses for gasoline, automotive maintenance and meals. Extension of the program over four years also meant additional fees and tuition for the program duration. The necessity to leave home for the on-campus summer instructional program meant foregoing salary for that period and students had to pay for child care during their class or study time.

Among negative outcomes of a more personal nature, the general level of student stress and anxiety was a constant factor mentioned by all students. The pressure of juggling work, family and student responsibilities simultaneously for the long-term duration of the program was perhaps the most significant negative outcome of all. Conflicts

between the various roles of working nurse, wife and mother were increased as the result of adopting the student role on evenings and weekends. Thirteen babies were born to students during the program, adding to the multiple role dilemmas of their mothers. Numerous other students were forced to postpone or decide against pregnancy permanently. Several divorces also occurred. All these events could be considered the result of role conflict.

Some students encountered major difficulties in the workplace. Some employers did not encourage the practice of "moonlighting" as a student. This problem was generally more common to the hospital nurse than to the nurse-teacher. Some students thought that the off-campus program could not make up for the many experiences students gain as a result of full-time, on-campus study.

Problems. Interviews with students yielded a broad range of information on problematic program areas. The listing below includes generally recognized problems with the program in the areas of curriculum, faculty and evaluation. Many problems mentioned were unsolvable, for example, the distance from Charlottesville to Bristol or Abingdon cannot be shortened. Some problems, however, could be addressed in future programs of this type.

Among curricular problems, the length of the program (four years) was mentioned as a general concern of students. The difficulty of seeing the unity of the program offerings over that time period and establishing conceptual connections between early and late courses was a general problem. A number of students were unclear about the sequence of courses they were required to take. This problem may be

related to program length also, as other students did recall a thorough orientation to the expected coursework given at the outset of the program.

While liberal use was made of photocopied handouts for class use, nearly all students mentioned access to library materials as a constant problem. The style of classroom instruction making use of the seminar approach, led a number of students to note that if the courses in teaching methods would have occurred earlier in the program they would have felt more prepared to give seminar papers or presentations.

Many students said that the educational benefit of the practicum experience was not commensurate to the time it required.

Students were required to take some final courses at the same time that theses and projects were in progress. They stated that completing all courses prior to beginning the thesis would have allowed more of a commitment to thesis quality.

While the quality of instruction in the research course was considered good, students believed it should have been more directly related to nursing issues likely to be dealt with in theses or projects.

In the area of faculty, the difficulty of staying in touch with faculty who live some distance from the teaching site was noted as the source of several problems. Among them were: difficulty in receiving timely advice on coursework or projects; too little faculty contact in general and a strong consensus that thesis guidance was inadequate for many students. Other faculty related problems included: a limited choice for preceptors in some areas and the difficulty of relating to instruction from non-nursing faculty members who do not focus on nursing needs.

In the area of evaluation, the problems of attrition, standards for evaluation and grading (especially in the clinical areas) and course objectives were mentioned by a large majority of students. The general consensus was that more attention needed to be given to early clarification of course objectives and the quality of performance expected, and that a system for periodic, structured evaluation of student performance with timely feedback should be formalized.

Comments on negative outcomes and problems from students who did not complete the curriculum of the Outreach Program are listed below.

Participation in Outreach detracted from the time available to work in local nursing association activities.

For some teachers, the experience was of no financial value unless completed. In addition, promotion and tenure depended only on actual service; additional credit hours without a degree were of no value.

Students who did not teach felt there was too much conflict in their position to warrant the intrusions the Outreach Program made into work-time.

The requirements that students make clinical visitations on weekends, especially on Sunday, conflicted with religious standards in some areas.

Faculty

Negative Outcomes. Since faculty members who participated in the Outreach Program did so as a part of their overall commitment to the School of Nursing, their travel expenses were met by grant funds. They incurred no out-of-pocket expenses as a result of the Outreach Program. Consequently, their perception of negative outcomes focused

less on the fiscal, and more on the personal or professional sacrifices which program involvement made necessary. The outcomes listed below summarize those sacrifices and can be summarized as both personal and professional.

The time devoted to the Outreach Program was a major cost to all participants. To faculty, the three to five hour travel time to teaching sites was generally perceived "down time," lost to such usually productive activities as reading, course preparation or writing. A normal day in which four hours were spent in a car, one hour in student advising and three hours in classroom instruction could not be as efficient as a normal on-campus day. The simple fact of fatigue from driving also detracted from the quality of classroom performance.

The absence of faculty from the program area on a daily basis meant that the intensity of sessions for advising, and the ratio of students to faculty during those periods faculty were available increased. While students were complimentary of faculty attention on teaching and advising days, faculty members perceived a pressure of student "overload" while at the program sites.

These expenditures of time and energy both in travel and on-site attention to student needs were seen as especially taxing to the on-campus duties of Outreach faculty. Some faculty mentioned the absence of collegial "support systems" while working in the Outreach Program as an additional cost. Other faculty members believed that the long-term impact of the Outreach Program on the on-campus teaching program, and especially on the careers of individual faculty would be negative. They concluded that the level of effort and the expense of time committed to the Outreach Program detracted from both the teaching and

the scholarship of program faculty. While non-Outreach faculty were not interviewed as to the effects of the program on them, the opinion was advanced that other faculty members assumed responsibilities which normally could have been distributed over a larger group had the Outreach Program not already claimed the attention of a number of faculty.

Problems. The nature of the Outreach Program, involving long distance travel, a student population of great contrast to on-campus students, and a commitment to long-term, part-time graduate work, was itself a source of problems. Most of those problems were perceived as a given part of the program, perhaps not available for solution. They were mentioned, however, as important to be noticed by others who might undertake an off-campus program. Most of the problems mentioned were related to the part-time nature of the program and to faculty evaluation of students.

Problems related to the part-time nature of the program included the following: faculty members agreed that their expectations of student performance and their own teaching roles were presumed to be identical both on- and off-campus when the Outreach Program began. However, as the program progressed, it became apparent that several factors forced an adjustment of these expectations. For example, many agreed that graduate study was incompatible with full-time employment, and most students were employed. Part-time students, therefore, could not be expected to meet the same standards as those studying full-time. Compounding the problem of part-time study was the lack of contact with students outside of the classroom.

Some faculty members saw the average age of students as a problem. They suggested that older students, established in their jobs, were more resistant to change than were younger students who were subjected to faculty influence on a full-time basis.

Evaluation problems included the following: faculty members found difficulty in adequately evaluating the ongoing clinical experiences of students. They also had trouble evaluating the input of clinical preceptors who supervised the clinical component, and perceived potential role conflicts because many preceptors were co-workers or otherwise personally related to students. In general, faculty believed that there was a lack of intra-faculty communication about advising and evaluation of students.

School of Nursing

Negative Outcomes and Problems. While program administrators were made amply aware of the problems with Outreach both on-campus and in the field, their comments focused upon the particular costs to the School of Nursing and its faculty. Again, in this area many concerns were mirrored by the general faculty.

The cost in energy from additional duties and increased student load caused tension among faculty members. The commitment to an off-campus program detracted from the quality of teaching, other student contact, and research on-campus. The potential for burn-out was increased among all the faculty. On-campus admissions had to be limited because of the Outreach drain on resources. Questions were raised about the feasibility of maintaining both an on-campus and off-campus program at the graduate level of comparably high quality.

Community

Negative Outcomes and Problems. Advisory committee members saw the Outreach experiment as generally beneficial to their communities, with no particular negative outcomes involved. While they mentioned some of the negative outcomes for students (i.e., program length, travel time, stress) as potential detractors from the productivity of working nurses, the consensus was that these sacrifices were personal, and would yield significant benefits to the students. Some general problems they saw with the program are listed below.

The clinical practicum experience was not congruent with student needs. The program attempted to serve too wide a geographical area. The location of teaching sites was of little value to those in South Central Virginia, especially the Danville-Martinsville area. There were many potential and real conflicts which could be traced to the differences in educational philosophy between community college based associate degree faculty and some University of Virginia faculty. It was believed that the University commitment to the "National League for Nursing standard of the baccalaureate as the first professional degree for nurses" could not be reconciled with "the mission of community colleges who continue to produce associate degree graduates."

Summary

This section has been presented as a description of the negative outcomes and problems reported by students, faculty, Advisory Committee members and Nursing School administrators who were interviewed as part of the Outreach Program evaluation. Their comments are presented in narrative and represent a consensus of responses from the interviews conducted following the survey process.

SECTION VIII
OVERALL PROGRAM ACCOUNTABILITY

The body of this report has been devoted to a description of the history of the Outreach Program, the methods used to evaluate the program, and specific findings of the evaluation effort in regards to the issues of effectiveness, cost, and benefit.

With data on effectiveness, cost; benefit and negative outcomes in hand, the final evaluation question to be addressed has to do with accountability. In other words, can a judgement be made about the overall value of the program and its results in reference to the resources which were spent to get these results? It is possible to answer the question — was the program worth the effort — by reviewing the comments and opinions of the groups who provided evaluation data.

During the interview process students, faculty, administrators and representatives of southwestern Virginia communities were asked to assess the overall value of the Outreach Program. Each group was asked to weigh the costs incurred and sacrifices made against the benefits that had resulted from the Outreach Program. The question was then posed — did the personal and financial costs outweigh the benefits?

Two other questions were asked in each interview: According to your understanding of the mission of the Outreach Program, did it address the problems and meet the needs for which it was originally proposed? and, should the Outreach Program be continued? Finally,

each interviewer solicited suggestions for change and program improvement in the event that a program like Outreach was planned in the future.

The following section addresses the issue of overall program accountability through an examination of the comments and opinions of the various groups who participated in it. Recommendations for change and improvement are listed as they were proposed by each respondent group. Conclusions as to the general value of the program are also summarized for each group. General conclusions in this section represent the consensus opinion of those interviewed as transcribed and reported during the interview process.

Student Suggestions and General Assessment

Recommendations for program improvement were offered on the assumption that future Outreach Program efforts or similar programs in other locations could make use of the experience of the University of Virginia program. Student recommendations fell into three categories: recommendations pertaining to curriculum, faculty and administration. In the area of curriculum, the students recommended to shorten the program length by putting more coursework into summers, especially for teaching minors; increase supervision of and add more structure to the practicum experiences; develop and articulate total curriculum plan prior to beginning coursework; give more guidance to students on their choices of electives; and substitute additional coursework for thesis or research project.

In the area of faculty, students recommended that future planning should locate at least some faculty in the geographical area where courses are taught, or as an alternative, locate a program manager or

coordinator in the area; make additional faculty constantly available for orientation during the first semester; locate and formalize commitments of preceptors before initiating coursework; and avoid using faculty with limited experience in teaching adult, graduate-level students.

Student recommendations for administration included suggestions to provide financial aid for students in the Outreach Program; to explore the possibility of providing child-care assistance or coordination during instructional periods; and to give additional assistance with housing in Charlottesville during the summer on-campus program.

A general recommendation of most students was that the Outreach Program be continued. Students in the Roanoke area believed that the master's level program could attract an adequate student load to remain viable. Farther south, students recommended an attempt to provide an Outreach Program at the baccalaureate level. Additional recommendations from students who did not complete the Outreach Program included allowing more transfer of credit hours from other institutions; giving additional orientation directed at adult learning techniques prior to beginning the program; and extending the time for completing a M.S. degree beyond the current five year limit.

In terms of the definitions which were employed in this evaluation, it would appear that to a majority of the students who entered the Outreach Program, the costs were outweighed by the benefits. Those students elected to remain for the program duration and to take advantage of the opportunity to complete a graduate degree in nursing. Despite the many problems students identified it was their general concensus that an off-campus program did provide a valuable educational service and should remain a regular option for working nurses in their region.

Faculty Suggestions and General Assessment

A number of recommendations mentioned by faculty members repeated the perceptions of students and advisory committee members who participated in the Outreach Program. Unlike the students, however, faculty consensus concluded that while the program had fulfilled a need in a previously underserved region, the costs to faculty members of the School of Nursing outweighed the benefits of participation. They recommended that the program not be pursued in the future and offered the suggestions below for other schools with similar off-campus aspirations. Recommendations are grouped as they relate to curriculum, intra-faculty concerns (i.e. promotion, tenure, etc.) and administrative affairs.

In reference to curriculum, some faculty members suggested that a shorter program, with more opportunities for contact between on-campus and Outreach students would enhance the student academic experience. Other faculty members emphasized that the on- and off-campus experiences need not be identical, and that the curriculum of the Outreach Program could legitimately operate under different assumptions because of its unique goals. There was general agreement that a schedule for the whole curriculum should be firmly developed and resources identified before courses are started.

In the area of administration, faculty believed that because of the length and stress of the Outreach experience student attrition could be alleviated if more demanding standards of admission were enforced. Some faculty felt that a centrally located teaching center in the program region would have added more cohesion to the teaching efforts. Fragmentation of resources (especially library and audiovisual) could be

thus avoided. A center for communication with on-campus faculty, perhaps staffed by a secretary or full-time coordinator, might also lessen student anxiety and add an enhanced perception of program stability. While the consensus of faculty members was that the program should not be continued by the University of Virginia, there was a general perception that the need for a graduate degree offering still existed in the program area and that a university in Southwest Virginia should fill the need.

Advisory Committee Suggestions and General Assessment

The recommendations of the advisory committee for program improvement are listed below:

Provide clearer program objectives and make program philosophy clear at the outset; adapt the curriculum to community needs; increase the number of faculty and the amount of student contact; along with more on-site faculty, increase the number of teaching sites in the program area in order to reduce the distance students travel; formalize the channels of communication between faculty and preceptors and give preceptors a clear list of duties, including standards for evaluating students before practicum experiences; maintain the M.S. program in the Roanoke—Roanoke Valley area; and offer a part-time Outreach baccalaureate program in locations south of Roanoke.

A majority of advisory committee members representing the communities served by the Outreach Program also felt the program had been effective in providing an educational alternative not previously available. They recommended extending the Outreach Program in the area surrounding Roanoke where student demand for the master's degree is still present. Farther south, the need for the baccalaureate

programs is more apparent. With the completion of the Outreach Program, many more teachers are now qualified to provide instruction at the baccalaureate level and could contribute to such programs.

Administrators' Suggestions and General Assessment

Administrators agreed that the program should not be extended beyond those students currently matriculated. The recommendations below were offered in light of future programs at this and other institutions: In planning the program, make extensive use of the experiences of other programs; fit the Outreach effort into the long-range plans of the school, making allowances for the inevitable drain on faculty resources and its effect on the on-campus program; clarify and promulgate prior to the beginning of courses: curricular objectives and philosophy, evaluation standards, task descriptions and level of involvement expected of faculty; expectations of students; cut travel time by use of airplane or other high speed means of transit.

Faculty and administrators of the School of Nursing recognized, perhaps most thoroughly of all, the difficulties of maintaining a quality instructional program on a long-distance basis. While they agreed that the Outreach Program had successfully extended the educational influence of the School of Nursing to a previously underserved area, they also indicated a reluctance to maintain the program beyond the graduation of students currently enrolled. The drain of fiscal and human resources was judged to be too costly to the ongoing graduate and undergraduate programs conducted on the main campus in Charlottesville.

Summary

The interview responses described above portray the variety of perspectives of those who were involved in the Outreach Program. Students and members of the Outreach area communities felt the most positive impact from the program and would support its continuance. Faculty and administrators from the University of Virginia, while recognizing the many successes of the Outreach Program, concluded that program continuance conflicted with the more basic missions of the School of Nursing.

Despite this overall conclusion on the part of University personnel, the institutional and professional relationships resulting from the Outreach Program were judged to be important outcomes of the project. While this program will not be extended, the affiliations with hospitals, schools and agencies in the Outreach Program area will remain. Perhaps most importantly, the need for graduate level education programs in Southwest Virginia is now widely recognized, and the model for off-campus instruction provided by the Outreach Program is available for use by nursing programs more geographically proximate to the area of need.

In view of these general responses it is clear that the Outreach Program was judged to be worth the effort by the majority of people who participated in it. Even though a decision has been made to discontinue the program, as the section on effectiveness (above) showed, the major objectives of the program were met. A group of masters degree nurses exist in an area where few lived prior to the program and that goal was achieved at a reasonable cost in terms of time, money and effort.

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APPENDIX A

OUTREACH PROGRAM STUDENTS

OUTREACH PROGRAM STUDENTS

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Max Meadow, VA

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Wilhoit, Kathryn W.
Johnson City, TN

OUTREACH PROGRAM GRADUATES MAY 1981
AND THESIS OR PROJECT TITLES

Debra M. Alley, "Cost-Comparison Analysis of Single College versus Tricollege Associate Degree Nursing Program."

Carol H. Blankenship, Myra D. Blankenship, and Kathryn W. Wilhoit, "The Relationship of Supervisory Leadership Style to Job Satisfaction of the Staff Nurse."

Katherine E. Dibble, Donna C. Elmore, and Cassandra Moore, "The Role of the Primary Nurse in a Friesen Design Hospital."

Connie A. Glass and Naomi W. King, "Sources of Stress Perceived by Nurses Working in Critical Care Units of Southwest Virginia."

Teresa S. Harris, "Reward Preferences of Registered Nurses."

Donnese C. Kern and Sheila H. Lyman, "Effects of Nutrition Education on Pregnant Women."

Charlene F. McPherson, "The Effect of Color Discrimination Training on the Accuracy of the Two-Drop Clinitest Method."

Georgia F. Miller, Karen Morgan, and Elizabeth B. Ronan, "A Comparison of Contraceptive Choices of Public Health Nurses and Clients."

Lynn G. Moretz, Linda D. Norman, Carla G. Proffit, Elsie V. Rudzinski, and Evelyn P. Umberger, "Development of a Nurse Managed Hypertension Adherence Clinic in a Community Setting."

Janet C. Owen and and Mary F. Vines, "Module Development on the Planning Phase of the Nursing Process for Orientation."

Elizabeth W. Perkins, Nancy C. Richardson, and Mary Ann Dill Smith, "The Development of an Audiovisual Preoperative Teaching Program for use in Southwest Virginia."

Linda R. Rickabaugh, "The Relationship of Anxiety to Restricted Activity and Respiratory Impairment in Persons with COPD."

Carol Taylor, "Accuracy of Pulse Palpation During Cardiac Exercise Programs."

Betty F. Turner, "A Study of Three Methods of Predicting First Quarter GPA and Probability of Graduation in an ADN Program."

APPENDIX B

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ADVISORY COMMITTEE FOR SOUTHWEST VIRGINIA MEMBERSHIP

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APPENDIX C

BENEFIT EVALUATION PACKET

CONTENTS

The materials included in this packet are:

1) Evaluation purpose statement;

2) List of objectives from the program proposal pertaining to specific survey group (students, faculty, advisory committee, administrators);

3) Benefit survey;

4) Evaluation interview form;

5) Analysis worksheet.

PURPOSE OF EVALUATION MATERIALS

The various checklists of objectives and survey materials in this packet have been developed as part of the evaluation phase of the Outreach Program. They are presented here for several reasons:

- To highlight the factors under consideration in the ongoing assessment of costs and benefits;
- To present the objectives toward which the program has been directed;
- To show examples of the data collection instruments which will be used; and
- To clarify the relationship among the factors of costs, benefits and program objectives.

The factors included here, along with the data which will result from surveys and interviews, will provide a focus for assessing program success and a base for recommending adjustments in future program planning.

PROGRAM OBJECTIVES YIELDING BENEFITS TO STUDENTS

ECONOMIC -

1) Access to higher paying positions
2) Possible promotion in current position
3) Long-term financial security through job mobility
4) Better credit as a result of perceived professional status
5) Improved likelihood of long-term career advancement

VOCATIONAL -

1) Certification to teach, become an administrator or assume expanded clinical responsibilities
2) More autonomy in current job
3) Heightened feeling of confidence in current job
4) More prestige with other professionals and with work peers
5) Impetus to work for an expanded role to use new knowledge and skills in current job
6) Opportunity to develop professional relationships with program faculty
7) Satisfaction from contribution to the quality of health care in the area
8) Likelihood of becoming a leader in local health care system and in professional organization
9) Development of skills to do research and enhance position in existing teaching job
10) Certification to undertake doctoral studies
11) Efficiency in performing general nursing duties

PROGRAM OBJECTIVES YIELDING BENEFITS TO FACULTY

1) Opportunity to work with graduate-level students
2) Opportunity to develop additional research materials and publications (professional development)
3) Improvement of personal understanding of graduate-level nursing
4) Consequent improvement in on-grounds teaching techniques
5) Exposure to heterogeneous student body with backgrounds and needs differing from the usual on-grounds student population
6) Exposure to more "practically oriented" nurses with work experience "in the field"
7) Opportunity to act as agents of change in extending new ideas and knowledge at the local level
8) Expanded contact with planners and deliverers of health care (i.e., extending professional contacts)
9) Opportunity for more involvement in planning, managing, and evaluating an educational program
10) Exposure to the unique needs of a rural patient population

PROGRAM OBJECTIVES YIELDING BENEFITS TO LOCAL COMMUNITY

1) Existence of a local graduate program allows the already functioning nursing population to remain in residence while expanding skills
2) Leaders are developed for the local health care system
3) Teachers are produced (and certified) to continue this program and assist in baccalaureate and diploma programs
4) General quality of nursing care is improved by practitioner training
5) Range of nursing services are expanded by diffusion of clinical specialty skills to local graduates
6) Trained administrators are developed for local nursing institutions
7) Nurses "in the field" have access to program offering as a source of continuing education
8) Particular concepts and techniques unique to the rural setting may be produced by the research efforts of the program graduates and faculty
9) A generally more productive force of working nurses

PROGRAM OBJECTIVES YIELDING BENEFITS TO NURSING SCHOOL AND UNIVERSITY OF VIRGINIA

1) Ability to draw more faculty desiring contact with graduate students
2) Opportunity to demonstrate service to previously underserved region
3) Additional income through grant support
4) Potential for future revenues in tuition and fees
5) Improvement in on-grounds instructional program though feedback from remote-site teachers
6) Development of more sophisticated information on graduate nursing in general
7) Opportunity to develop cooperative arrangements with other schools, hospitals, etc. in the program region
8) Establishment of a regional training center which could be used in in the future as a unique care setting for on-grounds students

STUDENT BENEFIT SURVEY

NAME: _____

The information below will be used to determine whether the objectives of the Outreach Program have been met and to make improvements to the program in the future. Please be frank in your responses; the information you provide will be maintained in confidence. Your name is requested so that we may keep track of the number of students who have been surveyed.

The sixteen factors listed below describe a potential range of benefits you may recieve as a result of your educationa experience in the Outreach Program. Please place an "X" next to all the benefits which you expect to receive after you complete the program. Then underline the benefit you feel is the most important factor to you.

____ I will be qualified for higher paying jobs

____ I will expect a promotion in my current job

____ I will be qualified for more different jobs, and will feel more secure financially

____ My financial credit will improve with a new professional stature

____ It is likely that my chances for career advancement over the long-term will improve

____ I will be certified to teach, become an administrator or assume more clinical responsibility

____ I will have more independence in my current job

____ I will feel more confident about my current job

____ My new degree will add to my prestige at work and with other nurses

____ I will be motivated to work for an expanded role to use my new skill and knowledge in my current job

____ I will benefit from the professional relationships I have developed with Outreach Program faculty

____ My education will give me a feeling of satisfaction as I improve the quality of nursing care in this area

____ I will be more likely to become a leader in my local nursing organization

____ The research skills I have developed will enhance my value in my current teaching job

____ I will be qualified to go on for doctoral study

____ I will be generally more efficient in performing my general duties as a nurse

COMMENTS: _____

_____

_____

FACULTY BENEFIT SURVEY

NAME: _____

The ten factors listed below describe a potential range of benefits you may have received as a result of your teaching involvement with the Outreach Program. Please place an "X" next to all factors you feel are positive results of your experience. Please underline the one factor that has been most important to you.

____ Opportunity to work with graduate-level students

____ Opportunity to develop additional research materials and publications (professional development)

____ Improvement of personal understanding of graduate-level nursing

____ Consequent improvement in on-grounds teaching techniques

____ Exposure to heterogenous student body with backgrounds and needs differing from the usual on-grounds student population

____ Exposure to more "practically oriented" nurses with work experience "in the field"

____ Opportunity to act as agents of change in extending new ideas and knowledge at the local level

____ Expanded contact with planners and deliverers of health care (i.e., extending professional contacts)

____ Opportunity for more involvement in planning, managing, and evaluating an educational program

____ Exposure to the unique needs of a rural patient population

COMMENTS: _____

_____

_____

BENEFIT SURVEY - ADVISORY COMMITTEE

NAME: _____

The eight points listed below describe a series of potential benefits to your community which may result from the Outreach Program. Please place an "X" next to all points you consider important positive results that the program will achieve. Please underline the single factor you consider most important as a program benefit.

____ Existence of a local graduate program allows the already functioning nursing population to remain in residence while expanding skills

____ Teachers are produced (and certified) to continue this program and assist in baccalaureate and diploma programs

____ General quality of nursing care is improved by practitioner training

____ Range of nursing services are expanded by diffusion of clinical specialty skills to local graduates

____ Trained administrators are developed for local nursing institutions

____ Nurses "in the field" have access to program offering as a source of continuing education

____ Particular concepts and techniques unique to the rural setting may be produced by the research efforts of the program graduates and faculty

____ A generally more productive force of working nurses

COMMENTS: _____

_____

BENEFIT SURVEY
NURSING SCHOOL AND UNIVERSITY ADMINISTRATORS

NAME: _____

The eight points listed below are potential benefits from the University's Outreach nursing program in Southwest Virginia. Please place an "X" next to those factors you expect to result from that program. Please underline the one item you consider the most important benefit of the Outreach Program.

____ Ability to draw more faculty desiring contact with graduate students

____ Opportunity to demonstrate service to previously underserved region

____ Additional income through grant support

____ Potential for future revenues in tuition and fees

____ Improvement in on-grounds instructional program through feedback from remote-site teachers

____ Development of more sophisticated information on graduate nursing in general

____ Opportunity to develop cooperative arrangements with other schools, hospitals, etc. in the program region

____ Establishment of a regional training center which could be used in the future as a unique care setting for on-grounds students

COMMENTS: _____

_____

_____

EVALUATION INTERVIEW FORM

Directions:

This Evaluation Interview Form should be used to give structure to the interview process following review of individually completed benefit surveys. The surveys focus upon benefits related to program objectives which were outlined in the program proposals and planning documents. The interview should allow for collection of additional, more personalized data such as narrative statements, and permit respondents to convey their general observations of program strengths and weaknesses.

Interviewers should refer to the completed benefit survey and proceed through the steps below:

A) Determine the reasons for the benefit checked as most important (if no benefit was checked, attempt to ascertain one);

B) Review all factors on the survey to determine the relative importance of other benefits which may have motivated respondents;

C) Solicit comments on any benefits not listed on the survey;

D) Determine major problems/costs of the program to respondents;

E) Allow respondents to expand on any comments they wrote on the survey;

F) Encourage other recommendations for program improvement.

INTERVIEW ANALYSIS WORKSHEET

NAME: _____

Directions:

This analysis worksheet should be used to provide structure to the information obtained during the interview with individual respondents. Each section is designed to correspond with the interview framework from the Evaluation Interview Form. Interviewers should refer to their interview notes and the completed Benefit Survey in completing this form.

I. Benefit Priority Sequence: (List benefit chosen as most important.)

II. List two other high priority benefits from the survey.

III. Comments on benefits not listed on survey.

IV. Comments on major problems/costs of program.

V. Program recommendations.

APPENDIX D

LONG-TERM IMPACT SURVEY

OUTREACH NURSING PROGRAM LONG-TERM IMPACT SURVEY OF PROGRAM GRADUATES

NAME _____

The questions below have been prepared in an attempt to assess the impact of the University of Virginia Outreach Nursing Program, and the program's success in meeting its objectives. Please answer the questions as accurately as possible. Feel free to add any comments on the bottom and reverse side of these sheets.

1. Are you currently employed as a

Nursing teacher	____	Nurse practitioner	____
Nursing administrator	____	Other	____
Nursing researcher	____	Unemployed	____
Staff Nurse	____	--(go to question 5)	

2. Does your position require the advanced training you received in the Outreach Program?

   Yes ____ No ____

3. Do you feel more competent at your work as a result of your participation in the Outreach Program?

   Yes ____ No ____

4. What new duties have you assumed as a result of your graduate preparation?

5. Do you plan to remain in the Southwest Virginia area?

   Yes ____ No ____

   No longer reside in Southwest VA ____

6. Do you plan to continue working as a nurse?

   Yes ____ No ____

7. List any specific impact you think the Outreach Program had on health care in the Southwest Virginia area.

_____

_____

_____

8. During the Outreach Program, most students indicated that they expected to receive three major benefits from their educational experience. These benefits were:

#1 long term career advancement
#2 professional relationship with program faculty
#3 feeling of satisfaction at improving quality of health care

Now that you have completed the program, if you still believe these three items accurately reflect the benefits you have received from the Outreach Program, please circle the most important one.

#1 #2 #3

If another benefit of the program was most important to you, please specify. _____

9. Have you made any scholarly presentations or had any publications accepted since completing your coursework in Outreach?

Yes ____ (please list) No ____

10. Have you pursued any new areas of scholarly investigation (research) since completing Outreach?

Yes ____ (please specify) No ____

11. Have you been promoted since completing Outreach?

Yes ____ No ____

12. Have you received any honors, certificates, or credentials since you completed Outreach?

Yes ____ (please specify) No ____

13. Have you joined any professional nursing organizations or other professional organizations since completing Outreach?

Yes ____ (please list) No ____